MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXXIII No. 11.

$4.00 per year. Single Copy 10 Cents.

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There is yet no other manufacturer of steel south of the Ohio river except the Birmingham Rolling Mill, but it is not likely to stand alone long. If pig iron can be made in this district of a quality and at a price to win customers at the uttermost ends of the earth, there is every reason to think that it could as well be worked up here, the finished article being sold then instead of the crude iron, keeping here at home the profit which rightfully belongs to the steel manufacturer. Nothing stands between us and such a result today except capital, which is always a little conservative in the matter of new enterprises. Labor could be had undoubtedly in any desired quantity at reasonable rates. If it were not to be had in the South, it could easily be induced to emigrate from the North, and that this is to be the next move on the board no one who can look even a little way into the future will feel the slightest doubt. A truly national sentiment leads us to look on such a development with entire equanimity. It is satisfactory from all points of view that such a center of cheap and efficient production exists in our midst, and in the future still more than today the American Birmingham is certain to bring honor to the American name in all the great markets of the world.—Philadelphia Manufacturer.

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Baltimore, April 8, 1898.

The Westinghouse Air-Brake Company

is now prepared to fill orders at an hour's notice for one or one thousand sets of **Air-Brakes for Freight Cars,** having at their new works an annual capacity for turning out air-brakes for

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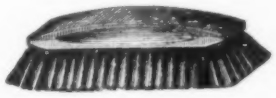

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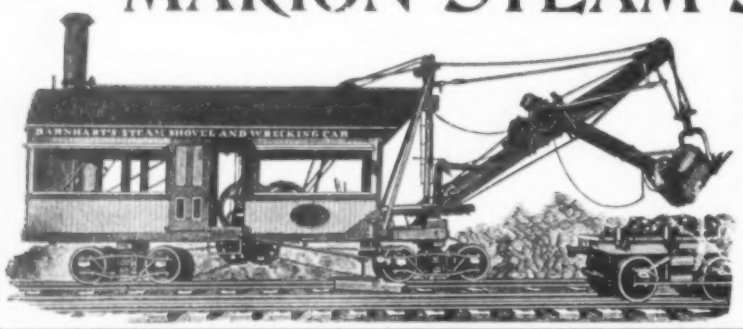

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Barnhart's Steam Shovels, Dredges, Ditching Dredges, Railroad Ditchers, Wreckers, Ballast Unloaders, etc. Our Steam Shovels are largely used on Railroads and by Contractors, Brick Manufacturers, and in excavating Iron Ore, Handling Stock Ore, Stripping Coal Fields and Stone Quarries, and are a most desirable machine for any use where excavating machinery can be used. All of our machines guaranteed to give entire satisfaction; otherwise may be returned at our expense.

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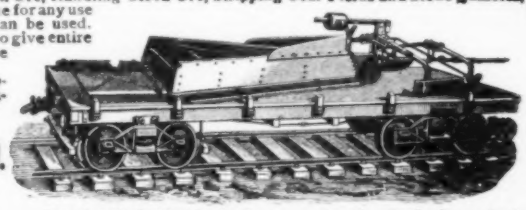

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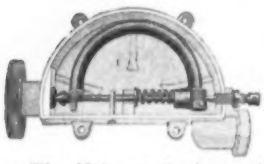

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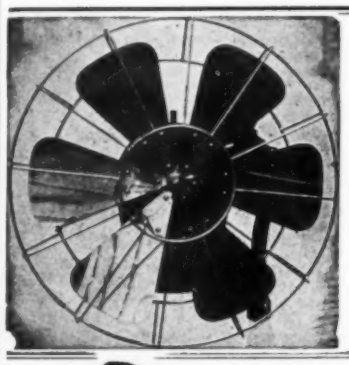

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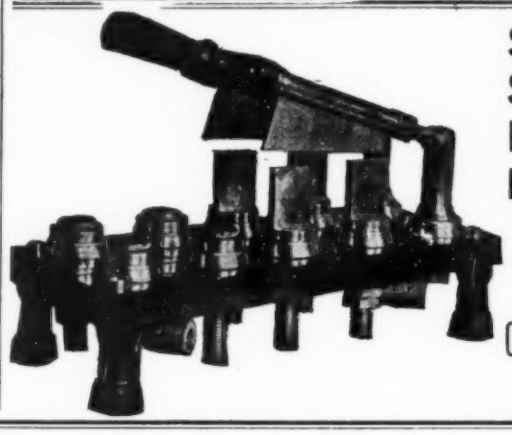

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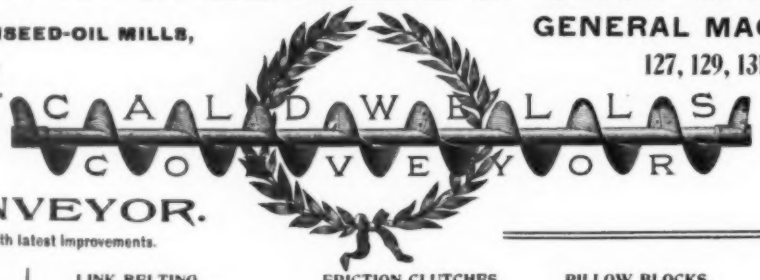

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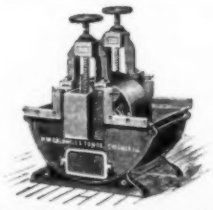

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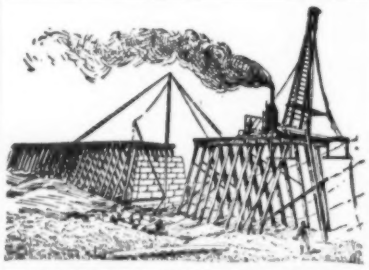

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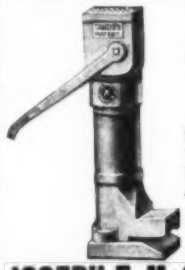

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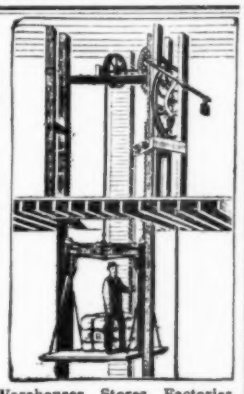

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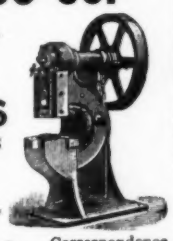

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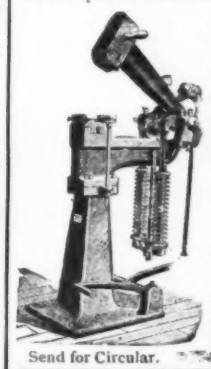

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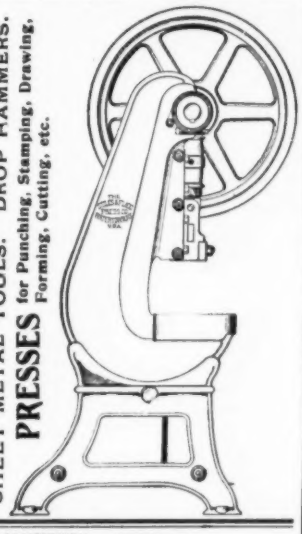

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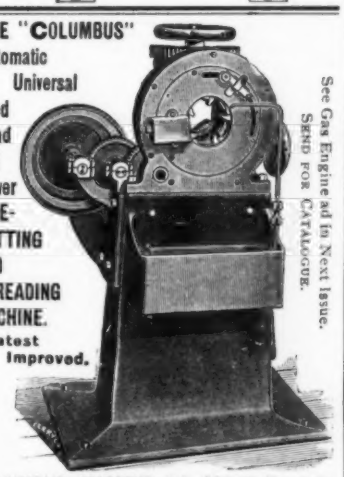

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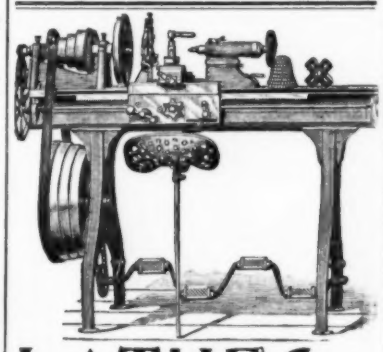

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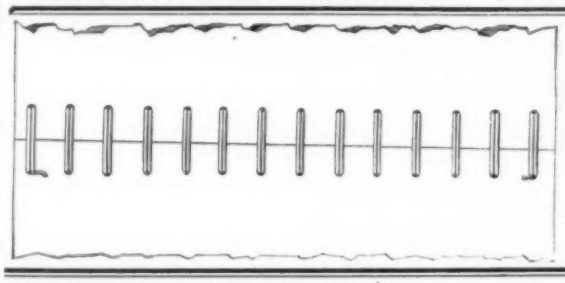

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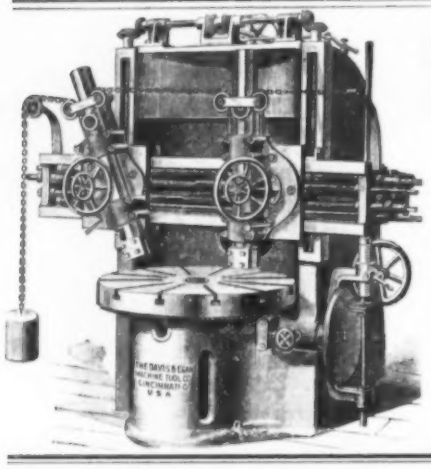

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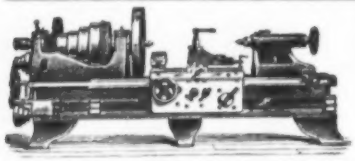

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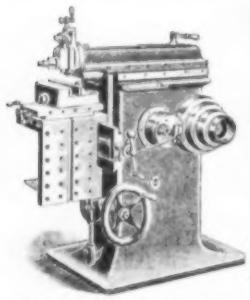

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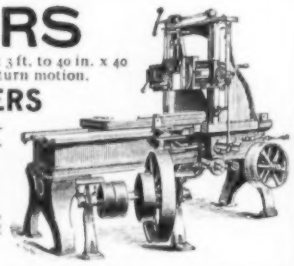

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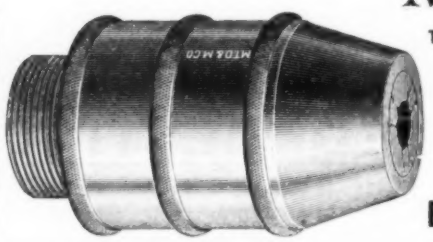

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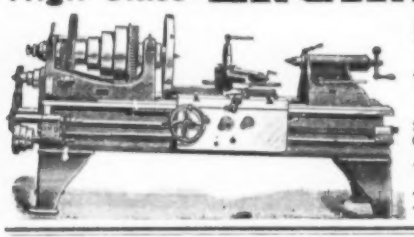

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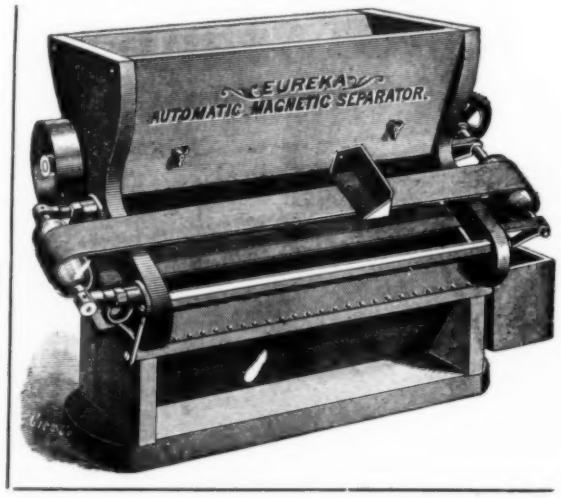

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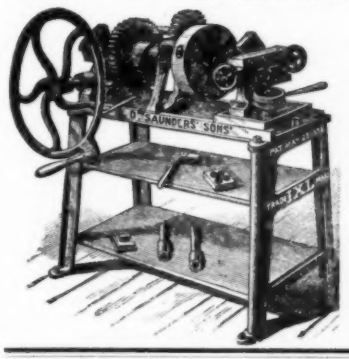

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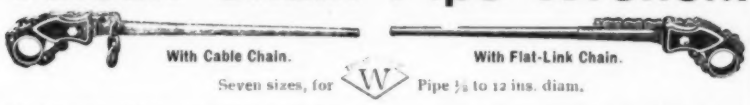

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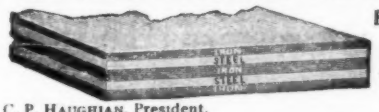

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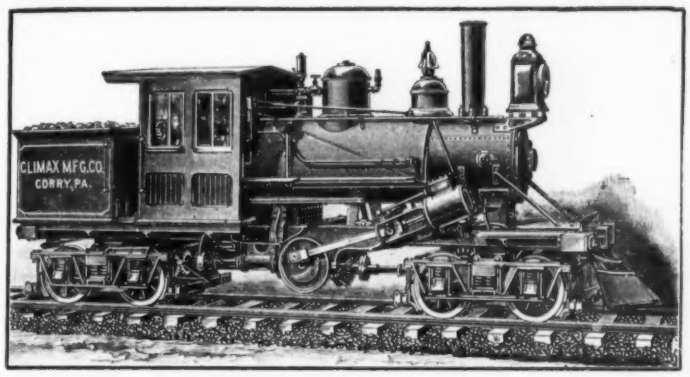

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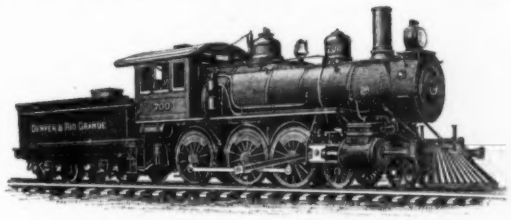

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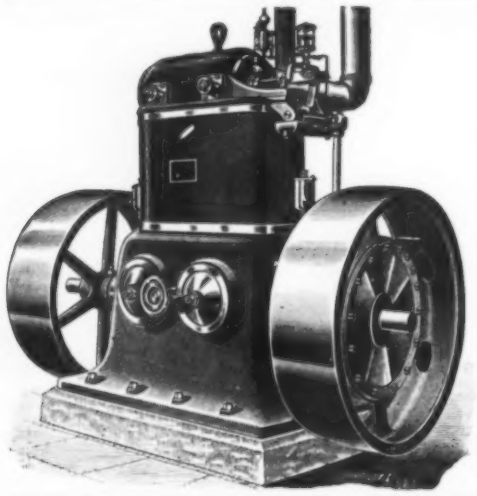

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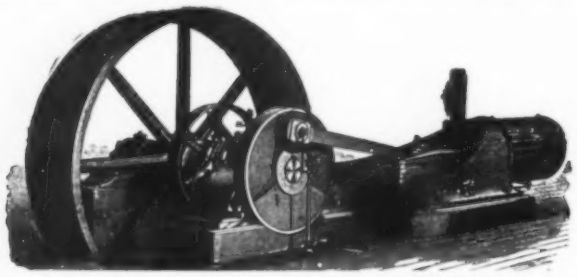

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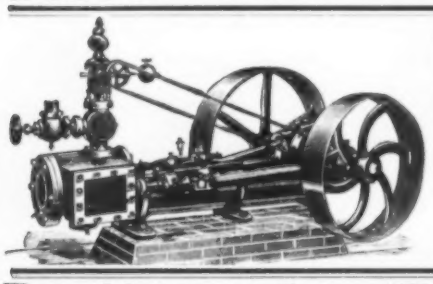

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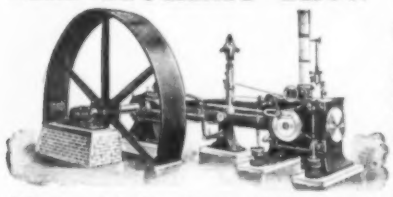

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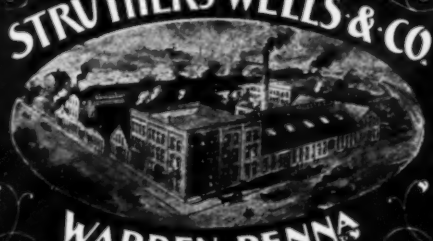

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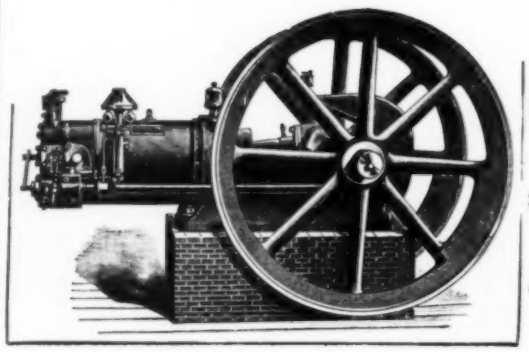

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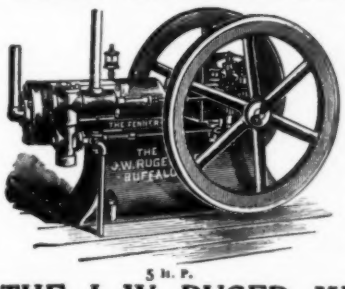

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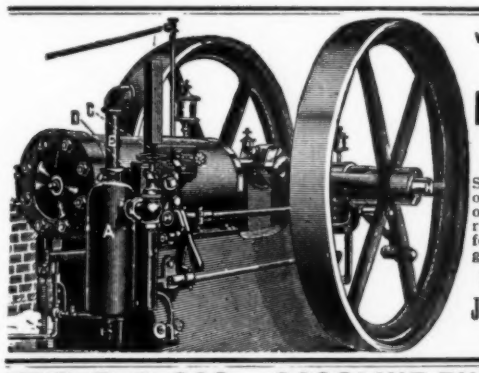

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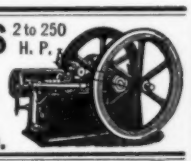

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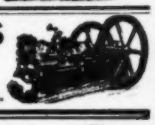

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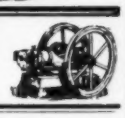

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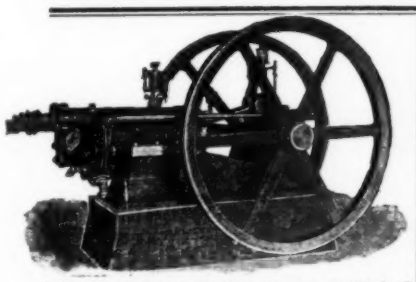

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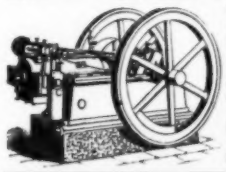

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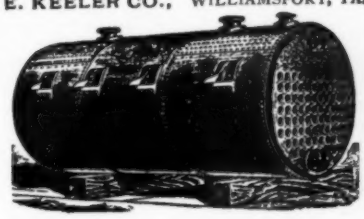

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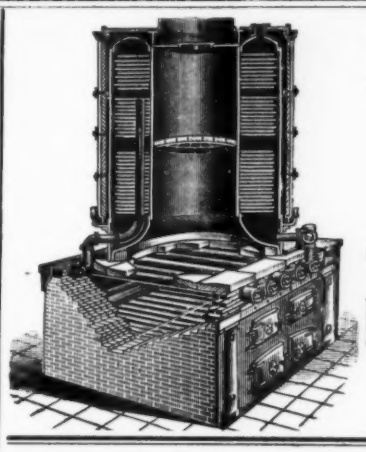

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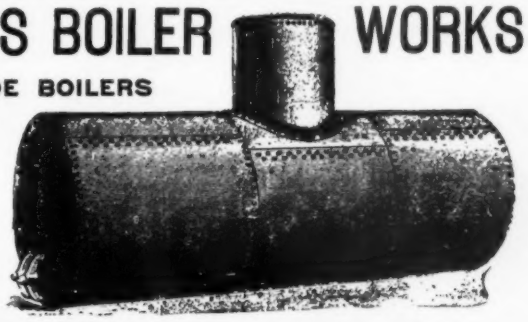

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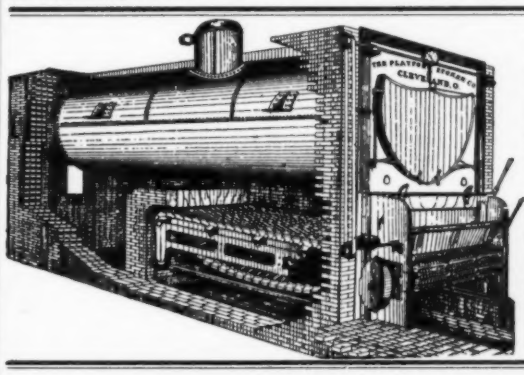

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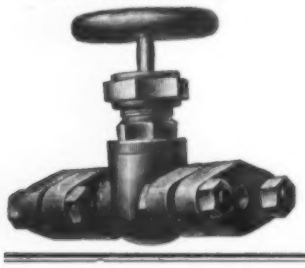

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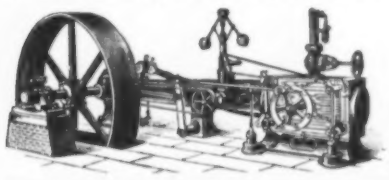

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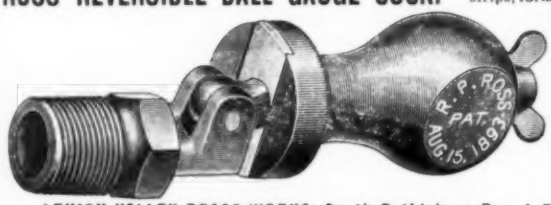

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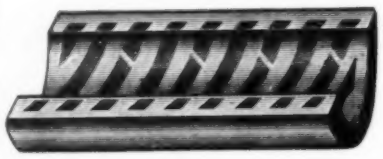

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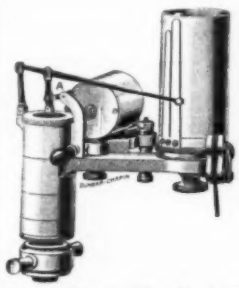

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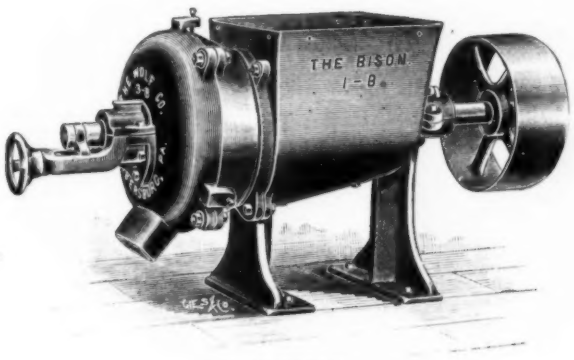

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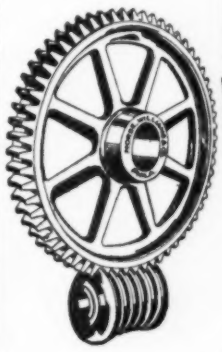

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Basket and willow-ware factories	2	13	10,000	25,000
Basket & veneer wks.	1	250	75,000	125,000
Breweries	1	100	167,000	300,000
Broom factories	1	10	2,040	6,000
Candy factories	10	60	100,000	325,000
Carriage&wagon wks.	6	100	50,000	100,000
Cider and vinegar	3	15	15,000	35,000
Cigar factories	9	100	60,000	252,000
Cotton factories	1	645	600,000	700,000
Cotton & wool pick's.	1	15	10,000	30,000
Cotton ties, etc.	4	20	10,000	25,000
Envelope & box facty.	1	63	30,000	75,000
Fertilizer works	12	1,400	5,325,000	4,255,000
Flour and grist mills	8	275	150,000	700,000
Foundries & iron wks.	3	200	250,000	700,000
Ice factories	2	25	75,000	100,000
Job printing and bookbinding	8	180	325,000	450,000
Knitting factories	1	90	24,000	40,000
Lead factories	1	10	40,000	130,000
Marble & granite wks.	5	60	40,000	75,000
Mattress factories	2	35	27,000	70,000
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Oil refineries	1	5	20,000	325,000
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Sail & awning fact'ies.	2	25	40,000	70,000
Sash & blind factories	5	320	350,000	850,000
Saw and lumber mills	8	250	300,000	850,000
Ship and boat yards	3	70	75,000	175,000
Shoe factories	1	45	25,000	100,000
Soap and candle facty.	1	15	25,000	60,000
Soda water, etc.	22	150	70,000	650,000
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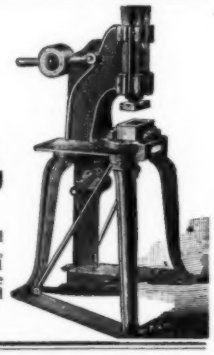

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A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

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BALTIMORE, APRIL 8, 1898.

William H. Edmonds—His Influence.

Much has been written in eulogy of William H. Edmonds, but what will shine longest in my memory as the bright particular star in his "crown of rejoicing" was the gracious but unceasing exercise of a moral activity, which was consciously felt by every man, woman and child who came within the radius of his personal influence.

There was something positively Christlike in this gentle influence, exerted so unobtrusively and yet so irresistibly; and as the good a man does is the true measure of his usefulness, I can but ascribe to his moral work a higher place than to his intellectual successes, and in this conclusion I am persuaded that all who really knew him will heartily concur.

That he was capable of making all who ever came in close touch with his kindly soul purer and better and less carnally-minded, was due to a combination of absolute unselfishness and uncompromising conscientiousness, coupled with a charity that was simply immeasurable.

In the course of an occupation requiring a very large acquaintance and the unsentimental study of human nature I have never come in contact with a man whose heart was so big, whose thoughts were so pure and noble, whose love of truth was so intense, and whose conscience was so religiously supreme in the direction of his conduct.

During the ten years of an almost brotherly intimacy with this gentle, but withal courageous, spirit, I have never known him to be swerved a hairbreadth from an unceasing hewing to the line of conviction; nor could he be either persuaded or tempted to deviate a single step from the path of duty as he saw it. He was one man who I know would not have done any of God's creatures a wrong for the greatest reward conceivable—one man who would never have even twisted the truth just a little bit to have saved his life.

I first knew him as one of my employers, and afterwards as my coworker, and in both capacities was continually brought into positions to share his perplexities and enjoy his confidences; and, though I have seen him beset by such harassments, encompassed by such conflicting influences and interests as would have made an ordinary man welcome almost any sort of compromise, yet never in his life, even when to other troubles was added severe physical pain, which brought him at times to a condition of pitiful physical weakness—never in his life, amid all his trials, was he ever known to yield to any temptation that meant the sacrifice of principle, even to the extent of a single "jot or tittle."

While that part of his life-work with which the public was familiar commanded universal approbation, and was rewarded by the highest kind of appreciation, yet I desire to repeat my belief that it will be not his public work, but the work which he did in private life, which will count for the most and whose results will be most lasting. If I had the writing of his epitaph, it would express this sentiment alone: His life was such as to ennoble, to purify, to spiritualize his brother man.

His person was the center of a radiant halo, and not only was its light felt (if not seen) by all those who came near unto him, but its purifying, elevating influence has, through others, made impressions whose far-reaching results it would be impossible to calculate. This potent moral force which he silently exerted, permeating to a greater or less degree the entire staff of the two publications to which his life was devoted, thus affecting a constantly growing constituency, accomplished two notable results: First, it helped to assure to these publications a deep-seated and widespread public confidence, and, second, it gave to American journalism a conspicuous example of the truth of the adage, "Honesty is the best policy."

When ten years ago I came to Baltimore to assume the duties of an employment involving work in the business department, as well as the production of matter for publication, I imagined, inasmuch as the Manufacturers' Record was the phenomenal journalistic success of the day, that I should find in William H. Edmonds a driving, grasping, results-at-any-price kind of a manager, for with such a type had my previous observations caused me to associate such substantial business results. Instead, however, of finding this preconception exemplified, I found a newspaper manager who, without the slightest suggestion of cant or assumption of self-righteousness, in giving me my "cue,' dwelt exclusively on the imperative importance of non-exaggeration in my attempts to secure business for the paper, and never to try to get any man's advertisement unless first fully convinced that it would pay him. At first blush I thought I had met the poet of the paper and not its business manager; but afterwards the man's actions, rather than his words, enlightened my materialistic mind to a new and higher conception of journalism, which was verily the starting-point of a new career. So it has been with many others who have come within the reach of this lovely Christian's influence—an influence exerted not in empty precept, but in his life, character and example.

I have met many men who talked love of truth even more energetically than William H. Edmonds, but I have yet to meet a single one who lived up to his utterances with such unfaltering consistency.

THOMAS P. GRASTY.

William H. Edmonds—His Personality.

We know that this life is but a probation, a pilgrimage, an opportunity to gain at last happily the true haven of rest in the real Land of the Living. We know that this earthly existence is, at best, but brief and full of trial and tribulation; we feel that when our dear ones pass away, dying in the Lord, that for them is ultimate happiness and triumph. Yet with such knowledge, and however fortified by Christian hope, our hearts are wrung with anguish when the parting comes. It was with inexpressible grief that I heard of the death of my friend, William H. Edmonds. The announcement of his serious illness, quite unexpected, followed too speedily by dissolution, produced a shock that remains with me poignantly as I pen these hurried lines of sympathy. My first acquaintance with him was, about eleven years ago, at Anniston, Ala., where I was editorially engaged during the exploitation of that town. At that time all of our hopes were high and buoyant. I well remember how alert, energetic and even joyous he was in the great work he had undertaken with his brother on the Manufacturers' Record, and that glad spirit was all the more elevated and ennobled by meeting at Anniston the charming, intellectual and devoted lady who afterward became his wife and the mother of his children. Even in those days, in his thirty-third year, the fertile, active brain and valiant soul shone out of their earthly tabernacle and enabled him to perform duties with apparent ease that stronger men, less richly endowed, would have shrunk from or sunk under.

To act well his part in every relation, as patriot, son, brother, husband, friend and Christian—this was the lofty purpose of William H. Edmonds. How admirably he did what his mission obligated him to accomplish is known partly to the public reached by his writings or by personal contact, but only thoroughly appreciated by the few who shared his confidence. There never was, I think, a more conscientious man of affairs, and never a braver one. I may add that his modesty equalled his sense of honor and matched his intrepidity.

Ordinarily, such praise is exaggeration, but in his case it is the simple, unvarnished truth. He was always anxious to do what was exactly just. He was ever eager to be serviceable by a kind of holy stealth. He was a strong opponent of what he deemed wrong and imposition, but he bore no malice. He was always desirous that others should succeed, and that they should get the amplest measure of credit for their work, even if his own share in it were wholly ignored.

He was singularly practical, while a lover of the high matters of literature, art and beauty. I have no doubt that his eagerness to labor, to lose no time idly, to bring all that occupied him to consummation, unfitted him to resist any serious physical illness. I have no doubt that his brain and spirit wore out the garment of the flesh, and that he did not take sufficient repose, which duller natures would have sluggishly compelled. It may be that he would have been much longer spared had he been less alert, vivacious and insistent upon toil. We know not how this is or may be. We only know that he wrought wonders in the space allotted, and that he is dead. We know that

his death has come with heartbreak to his loved ones, who were by him so ardently beloved. We feel that he has been summoned away when it pleased Almighty God, and that, terrible as the dispensation is, we must resignedly bow to the Divine decree and await consolations that time and faith alone can bestow. As one of his friends, I shall, while life lasts, mourn his departure, grieve with those whose grief is unspeakable, and fondly remember his generosity and encouragement to myself when friends were few and needed.

May his work fructify and be a benediction to his Southern land. May his deeds be recorded in the annals of his country as among its worthiest sons. May he sleep in peace and "his name be written in the Book of Life."

JAMES R. RANDALL.

Southern Coast Defences.

In a recent number of the Manufacturers' Record attention was directed to the comparative lack of preparation for war by the government at Southern ports, notably those on the Gulf. Since then, under the impulse of the possibility of active hostilities in the vicinity of the South Atlantic and Gulf ports, steps have been advanced for completing much-needed undertakings there. In the naval appropriation bill, which was passed on Friday by the House of Representatives, provision was made for a number of improvements of this kind. Among the most notable, perhaps, was the appropriation of $500,000 for buildings at the Naval Academy at Annapolis. This was an amendment to the regular bill, and one of the principal arguments, and a telling one, namely, that the men who were to serve in the navy required proper facilities for training, was made by Mr. W. W. McIntire, the congressman from the fourth district of Maryland, who had been indefatigable and persistent in his work for the amendment. Another, which was pressed by Congressman William Elliott, of South Carolina, was a provision for completing the work at the Port Royal (S. C.) station, and for equipping the machine plant. A third was the appropriation of $850,000 for a double-sided steel floating dock at Algiers, New Orleans, capable of lifting vessels of 15,000 tons displacement and twenty-seven feet draught of water. Congressman Meyer, of Louisiana, was active in behalf of this measure.

The necessity for a dry-dock of this kind on the Gulf has long been appreciated, and the neighborhood of New Orleans has been deemed the proper one for its location, in view of the position of that city in relation to the commerce of the Mississippi valley. Reports of three successive commissions and naval boards have pointed to Algiers as the proper site on the Gulf coast for a dry-dock. In addition, as is shown on another page, contracts have been let for the equipment of coaling stations at Key West and on the Dry Tortugas, requiring an expenditure of several hundred thousand dollars.

These undertakings will be of immense benefit to the South. In addition to rendering the defences of the Southern ports more effective, the expenditure of such large sums will at least be made to some extent in the South. The natural result of the establishment of large coaling stations off the Florida coast and of the dry-dock and its accessories at Algiers must be an increased use of Southern coal and Southern iron, and also of the naval stores produced in that region. Already the question of the base of supplies is being agitated in different cities, the claims of each being advanced vigorously. Col. J. C. Clarke, ex-president of the Mobile & Ohio Railroad, has sent to Senator Pettus a vigorous letter, urging the claims of Mobile as the base of supplies. In the letter he says:

> The outer bar which separates the deep water of the channel leading into Mobile bay from the deep water of the Gulf of Mexico is scarcely a ship's length in width, and the distance between more than thirty feet of water in the channel and more than thirty feet of water in the Gulf is only three-quarters of a mile. I have had examined the charts deposited in the United States engineering office at Mobile, and have had a rough estimate made of the amount of sand that it would be necessary to excavate to make a 31-foot channel, 600 feet wide, from the deep water of the Gulf of Mexico to the deep water in the ship channel, and I believe that this work can be done, at the current charge for dredging, for a sum not exceeding $50,000. If this work should be commenced at once and as many as three dredges put on it, it would be completed in time to be available for any of the purposes of our navy in the event of trouble with Spain. * * * It would seem to me that this is a matter of enough importance to call for an expenditure out of the emergency fund at the command of the President. Not only would this improvement be of immense advantage to the navy, but it would also be a great permanent advantage to the maritime interests of the city of Mobile. As you know, coal is delivered at Mobile as cheap as at any point on tidewater in the world, and can be sent at small expense in barges to the lower bay.

The Times-Democrat, speaking for New Orleans, says:

> There is good reason for believing that the United States government will make New Orleans its naval and military station on the Gulf, where supplies for its army and navy will be collected or purchased in the event of a war or a military display. The Times-Democrat called attention some days ago to the fact that there could be no better selection made than this city. New Orleans is closest to the great centers of production of the country, and is the most easily reached port from them; and it is the port whence all such supplies as are needed can be purchased at the lowest rate and exported most conveniently. It is the leading grain exporter of the South, the greatest shipper of provisions of all kinds, and one of the best coaling ports in the world, receiving coal from Alabama, Tennessee, Kentucky, Ohio, West Virginia and Pennsylvania. How important it is in this connection is shown in the fact that 2,000,000 bushels of coal are now coming down the river, a large part of it for the use of our men-of-war. As we have already noticed, the Spaniards in Cuba, after a trial of all the American ports, have found New Orleans the best market, and have latterly purchased all their supplies here. The people of Kansas City who sent a cargo of provisions to the starving people of Cuba the other day shipped them via New Orleans. These and a score of other incidents prove this city to be the best market for provisions and the best port on the Gulf for the purchase and shipment of coal, food and supplies of all kinds. If the United States contemplates any naval or military movements on the Gulf it should make New Orleans a station at which to purchase and store such goods, articles and supplies as it may need.

Other cities are equally alert, and even though the necessity for warfare may pass, the recent stringent situation cannot fail to have an inspiring effect upon the activity at the Southern seaports, rendered of greater importance by the government work or by such improvements as that contemplated by Mr. Huntington at Newport News. It is hoped that the Senate may complete the House's work promptly.

North Carolina Operatives.

In his comprehensive and thorough annual report Hon. James Y. Hamrick, commissioner of the bureau of labor statistics of North Carolina, presents interesting facts about the 29,287 men, women and children employed in the cotton mills of that State which ought to be widely circulated. He says:

> The employes of the cotton mills of the State form a very important part of her population. There appears to be an abundance of mill labor in the State, and the employes in these mills are better satisfied than any other class, and there is no antagonism between the employer and the employed. The matter of hours of employment is being settled by themselves, and neither employer nor employe favor legislation, for, in answer to questions on this point, only 5 per cent. were in favor of legislation. The employes seem to be satisfied, and the matter of time, if let alone, will be adjusted by themselves. There are no strikes, no favoritism, no dissatisfaction, no unjust decisions among the laborers of this State.
>
> Ninety-four per cent. of our factories report sufficient religious advantages for their employes, and this being true, tends to show the rapid advancement in religious training of this class of our citizens. There has been especial attention given to their religious training, almost all the mills having churches for their operatives, some that would do credit to our cities. Employes can attend church and Sunday-school every Sunday, and a great majority take advantage of the opportunity. We find in a great many cases the officers and stock-owners of the mill teaching the operatives in the Sunday-school.
>
> Financially, the operatives in our mills are very well off, for their employment is regular and their wages sure. Of the mills reporting, 70.8 per cent. report the condition of their employes to be good; 23¼ per cent. that it is fair; and of all the replies received, only five stated their condition to be bad. Not only is this class of our citizens living well and comfortably, but many of them are saving money, and a number of cases have recently come under the notice of this department where operatives have saved sufficient money to buy $1000 worth of the stock of the factory in which they were employed.
>
> The moral condition of our factory workers is most excellent, for as a general thing they escape the dens of vice that are so numerous in the great cities of this country, and at the same time enjoy the social intercourse of the town and receive the advantage of a good school education. The apartments in the factories are commodious, well lighted, heated and ventilated, and as much care is taken in the arrangement of the apartments of the operators as of the office; most of the houses are well built and ceiled or plastered, and are more comfortably arranged than those of any other class of laborers in the State. Little drunkenness occurs, for as a general thing no barrooms are in operation near the factories.

This picture of the life of operatives in a typical cotton-manufacturing State of the South should be carefully studied by those men who talk of elevating the Southern operative to the condition of the New England one. It should be compared with the pictures drawn of the life of mill hands at New Bedford, for instance, and should cause hesitation on the part of advocates of national legislation on the subject if it does not turn them from their purpose.

Trade With Texas.

The Chicago Record recently devoted considerable space to the opportunities for Chicago manufacturers and merchants in Texas. It was argued that a little organized effort on their part would perhaps obtain for them a large share of the trade of that State, the manufacturing interests of which are increasing rapidly, while in its area of 270,000 square miles are greater diversities of products and the possibility for more pursuits than any similar area in any part of the world. Cotton, wheat, tobacco, sugar, timber interests were dwelt upon at length, and Galveston, Houston, Belton, Temple, Weatherford, Cleburne, Fort Worth, Dallas and Gainesville were mentioned among the cities that are rapidly growing.

The moral drawn from these facts, that altogether Texas offers a large field for the incursions of Chicago merchants, is applicable to other cities in the South. St. Louis has already a magnificent share in the trade of that section, handed down from the early days of the Santa Fe trail. New Orleans has also its share, but there is no reason why Southern cities should not enjoy all the benefits of trade relations with the great State of the Southwest. And in the meantime Texas is in a position to be advantaged materially in any contingency.

Up Grade in Kentucky.

Alluding to the passage by the legislature of the bill permitting Louisville to assess her own franchise taxes and exempting any manufacturers from taxes for five years, which was mentioned in last week's Manufacturers' Record, the Courier-Journal says:

> We especially need manufactories in this State. The magnificent position on the map occupied by Louisville fits her for one of the great cities of America, but she can only become such by developing her industries. This is what has given Cincinnati such a wealth of trade, making her one of the richest and most powerful cities of the West. The proportion of her population which finds support in factory employment is at least three times as large as in Louisville. Our location is quite as good in some respects, and in others is far better. We have equal advantages in the way of navigation upon the Ohio, whose commerce is greater than that of any other river in the United States, and we have more railroad facilities than our wealthier rival.

The especial point of interest and occasion for congratulation noted by the Courier-Journal, and shared by the Manufacturers' Record, is that the hearty support accorded this bill by the legislature indicates that hostility to capital is passing in Kentucky. It is another indication of the waning of that temporary frenzy which threatened the interest of the South so greatly, and which even now at times crops out in legislative bodies.

Pensacola's Spirit.

Commenting upon the extension of the commerce of Gulf ports to Latin-American countries, and the intention of Port Arthur to ship 1800 tons of freight per month to Mexico, the Pensacola Daily News says:

> This is doing well for a baby port as Port Arthur. To this will be added a passenger service between the Port and Mexican points. All of which opens our eyes to the fact that while we are moving others are not asleep. In fact, Pensacola has numberless rivals in every branch of exports. It behooves her to be a "rousing hustler" that she may win the game. Pensacola's trade with Mexico could easily be made ten times its present extent if more energy were expended. Pensacola is in a position to make commerce with Mexico a great success. If Pensacola neglects the opportunity there will be others to step into her place. Others are hustling as well, and they who hustle more will get more. And Pensacola must continue to hustle.

The News here displays an excellent spirit and one that might be emulated elsewhere. In the energies exerted by other ports it sees no reason for envy on the part of Pensacola, but a strong incentive to greater activity. That kind of rivalry is healthy. A city inspired by it cannot but advance.

On April 3 the Houston (Texas) Daily Post issued its fourteenth anniversary number. When a newspaper anywhere is capable of publishing an edition of

fifty-eight pages, with 185 columns of advertising and 221 columns of reading matter, like the Post, both the paper and the community where it is published are to be congratulated. In a wide-awake, growing city, to which is tributary a rapidly developing section, the Post has magnificent promise of greater achievements than ever.

For an Industrial League.

From all accounts, the preliminary conference at Nashville of representative business men and farmers of Tennessee in behalf of the proposed industrial convention was a remarkable gathering. The speeches were few, but they were practical and suggestive, and indicated that the convention will be of the same character. It is confidently expected that the convention on May 11, which will remain in session as long as it has business to transact, will result in the organization of a permanent industrial league. Such a league can be of vital importance in the development of the magnificent resources of Tennessee, both in directing legislation to proper channels and in calling attention to investors in this country and abroad to the opportunities for safe and remunerative returns.

The Virginian and Pilot is the name of a new paper of Norfolk, Va., born in the consolidation of the Virginian and the Pilot, of that city. Its first issue, with William C. Elam as editor, indicates that the aggressive editorial attitude of the Pilot will be maintained, together with the progressive conservatism of the Virginian. Both papers have been of great benefit to their city and section. Their merging promises enlarged influence.

With the concession gained by the Merchants and Manufacturers' Association as to stop-over privileges on tickets to and from the South by way of Baltimore, and the activity of the Retailers' Association in organizing excursions to the city from its immediate tributary territory, Baltimore is promised a gratifying increase of importance as a trade and industrial center.

Augusta's Fine Showing.

In attractive pamphlet form, bound in a handsome cover, have been published the official reports of the city of Augusta, Ga., for 1897. The publication includes the mayor's message, department reports and accompanying documents, with a report of the board of health, and is illustrated with half-tone engravings of municipal offices, public thoroughfares and buildings. Much of the matter contained in the report is of purely local interest, though of value also to the student of comparative civics. An important feature, occupying nine pages, is a chapter devoted to leading facts about Augusta, treating of its location, streets, water and light, educational institutions, churches and charities, shipping facilities and finance, the canal as a source of industrial power and climatology. These facts will undoubtedly do much to attract attention to the flourishing Georgia city.

Looking for Railroads.

In North Arkansas there are mountains of as fine marble as the world produces. The difficulty of getting it to market prevents the development of these wonderful deposits. When railroads penetrate that section the marble, zinc, lead and manganese products will be found as rich as anywhere on the globe. —Little Rock Gazette.

DRY-DOCK AND COALING STATIONS

Important Improvements at Newport News, Key West and the Tortugas.

The government has realized the necessity for supply stations on the Southern coast and has let contracts for very important coaling depots at Key West, Fla., and the Dry Tortugas Islands, off the Florida coast. Key West at present has sheds which will contain about 20,000 tons. In addition to these, it is proposed to build two additional houses, each 250x100 feet in dimensions. The framework will be of steel and the buildings supported upon pine piling driven into the coral reef formation at this point. In connection with the depots will be constructed a pier 304x48 feet, extending into the harbor at a point where the water is thirty feet in depth. It will be constructed of steel on a piling foundation, with an approach 464 feet long and 16 feet wide of wood. The head of the wharf will be protected by steel piling, bolted together, and upon it will be placed a 10-ton crane for handling heavy loads.

At the Dry Tortugas two coalhouses of the same dimensions as those at Key West are to be built, and according to the same plans; also two piers, each 304x48 feet, with the necessary approaches, one of which will be 112 feet and the other ninety-six feet in length. An elaborate system of conveying machinery has been contracted for at a cost of $151,000 with the Brown Hoisting & Conveying Machine Co., of Cleveland, O., which makes a specialty of apparatus of this kind. At the two stations eight conveyors in all will be erected and operated by steam-power. By their means fuel will be transferred from vessels to the coalhouses. Warships will also be coaled by means of the conveyors, as, owing to the depth of water, they can come alongside of the piers and receive their supply direct by this machinery.

The arms of the conveyors will be fifty-five feet above the piers, with a reach of about forty feet, which will allow the operators, if necessary, to transfer coal from barges which may be alongside the pier to the warships without the necessity of taking supply from the coal depots.

When the work is complete the government will have facilities for storing 30,000 tons under cover at Key West and 20,000 at the Tortugas; but, if necessary, a large amount can be placed by the side of the depots for a reserve supply. The contract for the buildings, piers, etc., has been awarded to the Union Bridge Co., of New York, the price being $590,000. All of the work is to be completed by September 1 of this year or sooner.

In this period of emergency a letter to Congressman Cannon, of Illinois, from Mr. L. E. Payson regarding the proposed additional dry-dock at Newport News, Va., is of particular interest. In his letter Mr. Payson, who is the attorney for the Newport News Shipbuilding & Dry Dock Co., says:

"The dry-dock will be 1140 feet long, ninety feet wide at bottom, taking a ship of ninety-five feet beam, with a middle gate, thus taking in two vessels at one time, if necessary, and costing approximately $1,000,000, the size of the dock accommodating at one time any two of the largest battleships in the world. The depth of water over the sill will be thirty feet. The dock will be completed within one year from this date. Its construction will be pushed with the energy characteristic of this yard. I show you with this a blue-print of the preliminary plans of the new dry-dock, as well as existing dry-docks, all located practically in the center of the shipyard, with shops of all kinds close at hand, complete today with the largest and most improved machinery known to shipbuilding.

"This company has at this time the most extensive and best modern shipbuilding and ship-repairing plant in the world, and will enlarge and improve upon what it has in connection with the new dry-dock. As illustrating, work is approaching completion upon a new hoisting crane, with a capacity of 150 tons, to be located below the old dry-dock and at a wharf near the proposed dry-dock, for utilization with it.

"The wharfage facilities of this company are abundant, as shown by the blue-print, and will accommodate any ships afloat, or contemplated, in the world.

"This company recognizes the necessity of such a dry-dock within the United States and on the Atlantic coast, that this nation shall not depend upon the courtesy of a foreign nation when dockage of our large cruisers and battleships is necessary for any purpose.

"The harbor of Newport News is one of the best in the Union, and it is the intention of the officers of this company to put its works and yard in condition to propose to the government to do any character of work or repairs with the utmost expedition, and by a large percentage more economically than the same can be done at any government yard. For extensive repairs upon cruisers or battleships the advantage of having a very large force of skilled mechanics ready for immediate work is apparent, as is also the ready availability of the immense plant and machinery which this company has and will maintain. Moreover, it is ready and willing to enter into a contract with the government, giving its work immediate preference and treating any contract as one of urgency when desired by the government, working day and night if desired in urgent cases. Undoubtedly very much minor repairing should and will be done at the government yards, but it is submitted to you that such advantages as can be offered by this company in its new dock, shops and yards and appliances cannot be hoped for, as to larger work upon the great ships in our navy, in the national navy-yards.

"The advantages which this company has briefly alluded to above will be placed at the disposal of the government whenever it desires the use of any upon the most reasonable terms, and always at a large percentage less than the government could provide for itself, and secure results at a great profit to itself over work done at its own yards."

SUGAR-BEET INDUSTRY.

Results of Last Season's Distribution of Seed.

The Secretary of Agriculture has transmitted to the President for the information of Congress a very full report on the present condition of the sugar-beet industry in this country, and of the operations of the department during the past season in relation thereto. The first part is the report of the chemist of the department, Dr. H. W. Wiley, in which the history of the industry is reviewed and a full account of the season's operations given as follows:

The principal distribution of sugar-beet seed the past season was made through the agency of the agricultural experiment stations, the directors of many stations having been appointed special agents of the department for carrying this method into effect. Seeds were also sent to about 10,000 farmers in different parts of the country, with full instructions for planting, cultivating and sampling for analysis. These instructions were contained in Farmers' Bulletin No. 52, of which during the season nearly 150,000 copies were distributed. The samples for analysis were sent either to the agricultural experiment stations or to the Department of Agriculture. In all about 2300 samples were received for analysis at the Department of Agriculture.

The best results were reported from the States of New York and Michigan. Other States in which reports were favorable were Wisconsin, Ohio, Indiana, Minnesota, Nevada, South Dakota, Wyoming and Colorado. States giving fair results were Iowa, Nebraska, New Jersey and Pennsylvania. In general, it was found that after passing south of the mean isotherm of 71 degrees F. for the three months of June, July and August the results were poor. It is found that the belt of territory included between the limits of the isotherms of 71 and 69 degrees may be regarded as the basic belt of the beet-sugar industry. The best results are obtained within or north of this belt, other climatic conditions being favorable. Extreme northern limits of sugar-beet culture are determined only by the advent of freezing weather.

A comparison of analytical data with the thermal area shows a remarkable agreement. In States so situated that their northern portions are in the favorable thermal area, while their southern portions are without, comparison of the analyses of the beets grown in the southern, central and northern portions of these States shows a regular gradation of excellence from south to north.

The conditions of growing beets under irrigation have been studied somewhat, but imperfectly. The data collected, however, are very reassuring and lead to the evident belief that irrigated lands, under proper thermal conditions, will give most excellent returns with beets.

The report closes with a chapter on statistics of sugar production in this country during the year 1897. During the season nine factories were in operation in the United States, namely, at Alameda, Los Alamitos, Watsonville and Chino, Cal.; Lehi, Utah; Eddy, North Mexico; Grand Island and Norfolk, Nebraska, and Rome, N. Y. Forty-one thousand two hundred and seventy-two acres of beets were harvested, with an aggregate weight of 389,685 tons, a yield of almost nine and one-half tons per acre. This is less than the average in Europe, but with more scientific agriculture and judicious fertilization the yield in this country can doubtless be brought up to, if not above, the average of the best fields of Europe. The careful experiments of the New York experiment station, at Geneva, with beets grown in collaboration with the Department of Agriculture, resulted in an average yield of over sixteen tons of high-grade beets per acre.

The total amount of beet sugar made in the United States during the year 1897 was 90,491,670 pounds, an average of 232 pounds per ton of 2000 pounds, or 11.6 per cent. of the weight of the beets. This is a less percentage than is obtained in Germany, but, considering the newness of the industry in this country, it is sufficiently encouraging. Reliable information shows that there will be in operation in the United States during 1898 seventeen factories, new factories being located in Utah (1), Oregon (1), California (4), Michigan (1) and New York (1). It is safe to say that at least 80,000 acres will be planted in beets during the season of 1898. The yield of beets may be expected to be nearly 800,000 tons, and of sugar about 180,000,000 pounds. These estimates should be reduced somewhat to represent the proper output of beet sugar in the United States; they are sufficient, however, to show the rapid growth of the industry, which will experience an enlargement of not less than 70 per cent.

during the coming season. The percentage of beet sugar produced in the United States during 1897 to the total consumption was only 2¼, but the prospects are that in 1898 it will be nearly 4 per cent. of the total consumption, which now amounts to about 2,000,000 tons annually.

ELECTRIC LIGHTING PLANTS.

Present Extent of Their Use in the Southern States.

In the American Electrical Directory, just published by E. L. Powers, of Chicago, an exhibit is made of the central station electric-lighting business of the United States, which will attract wide attention in this country and abroad. By tables are presented the extent of the business, its division between public and private ownership, the relative distribution of the different systems of lighting in use and the power employed in generating the current.

There is a total of 2594 central electric-lighting stations operating in the United States, of which 333 are owned and operated by municipalities. These stations operate in the aggregate 290,515 arc lights and 7,605,574 incandescent lights, employing 1,038,221 horse-power in steam and gas engines, turbine and other water-wheels. From the tables in the directory have been compiled the following statistics illustrating the extent of business in the South:

In fifteen Southern States and the District of Columbia there are 404 central stations operated by private corporations, firms and individuals, with a capital stock of $34,752,225, operating 37,976 arc lights, 996,870 incandescent lights, employing 141,450 horse-power. Seventy municipalities have central stations operating 4256 arc lights and 68,933 incandescent lights by 9890 horse-power. The tables follow:

AS PRIVATE UNDERTAKINGS.

States.	No. Central Stations.	Capital Stock.	No. Arc Lights.	No. Incandescent Lights.	Engine Horse Power.
Total....	2261	$229,938,605	264,428	7,234,134	970,481
Ala.......	22	$1,815,700	2,781	29,975	7,280
Ark.......	21	1,307,500	1,011	21,220	4,225
Dis. of Col.	2	1,525,000	550	21,200	3,800
Fla.......	14	531,000	1,232	17,550	5,195
Ga.......	23	2,045,500	3,012	58,750	10,745
Ky.......	33	2,079,800	3,174	96,450	10,285
La.......	7	900,725	2,382	44,090	7,135
Md.......	25	3,987,000	4,626	79,700	13,235
Miss.....	13	1,556,500	642	13,950	2,470
Mo.......	72	9,449,500	8,824	298,660	29,085
N. C......	18	853,100	828	19,755	2,195
S. C......	13	471,600	702	15,150	4,920
Tenn.....	22	1,347,300	2,241	75,885	9,730
Texas.....	67	4,554,900	3,031	115,510	17,940
Va.......	28	1,254,500	2,185	39,995	7,770
W. Va.....	24	1,072,600	725	46,040	5,430
T'l South.	404	34,752,225	37,976	996,870	141,450

OPERATED BY MUNICIPALITIES.

States.	No. Central Stations.	No. Arc Lights.	No. Incandescent Lights.	Engine Horse Power.
Total....	333	26,087	371,440	67,740
Alabama....	2	......	900	180
Arkansas....	2	215	300	335
Florida....	2	270	9,000	680
Georgia....	8	358	6,680	885
Kentucky....	5	410	1,100	630
Louisiana....	1	8	2,000	200
Maryland....	1	76	......	85
Mississippi....	1	35	1,800	330
Missouri....	19	1,067	32,120	3,035
North Carolina....	5	183	3,860	415
Tennessee....	8	179	3,640	665
Texas....	7	500	4,670	1,100
Virginia....	8	485	2,963	850
West Virginia....	1	470	......	500
Total South....	70	4,256	68,933	9,890

These tables show that the opportunities of the South in the use of electricity for lighting purposes have not yet been fully exploited. Rapid progress, to be sure, has been made in recent years, but with the growth of towns and cities under industrial and commercial influences, electric lighting is certain to be more and more the system, especially in those States where much of the natural generating power is yet to be harnessed.

IN THE JOPLIN DISTRICT.

Great Development of Lead and Zinc Mining.

In a report by Mr. George E. Quinly, State mining inspector of Missouri, it is shown that that State has produced in 25 years lead and zinc to the value of $50,000,000. In his report he says:

"The mining industry of Missouri is experiencing the brightest days of its history. The resources are so varied and the natural wealth of the State is so enormous that many thousands of our people do not realize that Missouri presents to the world the greatest of lead and zinc fields. The mines are not only the greatest in point of production, but are famous the world over for the superior quality of high-grade zinc ore which they produce. The mining industry has steadily grown since 1873, when the first shipment of zinc blende was made to the reduction works at La Salle, Ill., to the present time, when the production of both lead and zinc is enormous. As the capital necessary for the production of zinc ore is small, and the cost of production is light, the profits in the business are large.

"From the year 1873 to July 1, 1897, Southwest Missouri has produced 1,757,351 tons of zinc ore, which brought the magnificent sum of $33,500,000. The lead ore produced during this time sold for about $17,000,000, making a money value of both ores of $50,500,000. This great wealth has been the means of building up many important towns in this mineral district, among which are Joplin and Webb City, which are the centers of population and commercial activity for the entire mining district.

"The area covered by actual developments and producing mines of Southwest Missouri includes Jasper, Newton, Lawrence and Greene counties. The great bulk of the heavy producing mines are situated in Jasper county, yet the other counties mentioned are producing remarkably well. The district proper embraces a territory about 100 miles from east to west and about fifty miles north to south.

"St. Francois, the greatest lead-producing county in the State, is making a material increase over last year in her production. Much new capital is centering there, and a great deal of prospecting is carried on. Washington, Jefferson, Madison and Franklin are also alive to the importance of their ore deposits, and are making some splendid developments. Christian, Dade and Barry are also counties to be classed with those of the mineral, as much prospecting is being done, and good bodies of ore have been found in each. I have visited many new mineral counties in the State, but none of them has a brighter prospect than Cole. The strikes of zinc southwest of Jefferson City present a very high-grade ore, and apparently in great quantities. I look forward to Cole county as taking rank with the heavy producing mineral counties of the State in the near future.

"As I have the data at hand, I give below the production of lead and zinc since July 1, 1897, to March 12, 1898, covering a period of thirty-six weeks, for the counties of Jasper, Lawrence and Greene. Aurora and Stotts City districts are in Lawrence, Springfield district in Greene, the other districts are in Jasper county.

	Pounds.		
	Zinc.	Lead.	Value.
Joplin	48,093,490	12,406,530	$819,640
Carterville .	43,654,490	8,632,620	649,695
Webb City..	22,772,460	1,657,860	270,524
Oronogo ...	10,373,770	574,860	117,331
Carthage ...	1,994,480	......	22,423
Aurora	23,228,880	896,000	204,545
Stotts City..	7,709,796	352,370	95,655
Springfield .	1,674,700	188,190	22,737
Totals	159,504,066	24,681,430	$2,202,550

"The above figures show Jasper county's production to be for the thirty-six weeks of the present fiscal year 184,987,700 pounds of zinc and 23,044,510 pounds of lead, valued at $1,894,807.

"During the same period for the year ending June 30, 1897, this county produced 102,600,000 pounds of zinc and 17,825,500 pounds of lead, thus showing an increase in production for the thirty-six weeks of 22,387,700 pounds of zinc and 5,219,010 pounds of lead, and an increase in the money value for the time mentioned of $482,923.

"Should such a percentage of increase be maintained for the next sixteen weeks, the close of the present fiscal year, Jasper county will present to us the enormous production of 186,622,836 pounds of zinc and 34,987,914 pounds of lead, valued at $2,844,855.

"This will place Jasper county's production of zinc ore a little beyond the entire production of the State for the last fiscal year.

"Lawrence county has produced during these thirty-six weeks 30,938,676 pounds of zinc and 1,248,360 pounds of lead, valued at $300,190. Continuing at this rate of production to the close of the fiscal year, this county will have produced 47,634,884 pounds of zinc and 1,710,760 pounds of lead, valued at $458,824, making a clear gain of production of zinc ore of 25,052,884 pounds over last fiscal year.

"From reports received Greene county will increase her output about 50 per cent. The increase in the production of lead and zinc ores and the increase in the money value of the same for the first thirty-six weeks of the present fiscal year is not only very significant, but almost startling. Should such an increase be maintained to the close of the fiscal year the counties above mentioned will have produced the unprecedented figures of 230,325,192 pounds of zinc and 35,650,940 pounds of lead, valued at $3,181,464.

"A large amount of capital is being invested in developed and undeveloped mineral lands in the various mineral districts throughout the State. St. Louis, Kansas City and Chicago capitalists are among the heavy and successful investors. Also many Eastern capitalists are finding out how profitable Missouri's lead and zinc fields are and are making wise and heavy investments.

"Owing to the cheapness with which mining operations are conducted, and the small cost of machinery necessary to clean the ore and the reasonably fair prices paid for the product, the production and profits for the present fiscal year will far exceed that of any year in the history of the State. The mild and equable climate and the low cost of living, the superb school and church facilities throughout the various mineral districts of the State, make the mineral belts of Missouri an ideal place for the miner, with every opportunity open to him to reap a fortune without the investment of any capital except his labor."

Mt. Pleasant, Tenn.

[Special Cor. Manufacturers' Record.]

Mt. Pleasant, Tenn., April 4.

Since the phosphate discovery in this region Mt. Pleasant has been coming rapidly to the front as one of Tennessee's livest little cities. It is in a rich agricultural section. Many industries have been located here. Messrs. Charles S. Jackson and Rufus C. Jackson are erecting two new store buildings on Main street. The first floors will be used for storehouses, while the second floor will be fitted with a complete newspaper outfit, and Rufus C. Jackson will at once begin a publication devoted to the interests of Mt. Pleasant.

COMMERCE.

This department is devoted to a record of the rapidly developing commerce of Southern ports.

SHIPMENTS OF COTTON.

Their Defects from the European Standpoint Noted.

Mr. James Maccabe, chief cargo surveyor of the Liverpool Salvage Association, has been in this country and has been laboring to have cotton shipped in better condition to European points. He has been examining terminals at the principal Southern cities. At a recent meeting at New Orleans, at which resolutions in favor of better storage facilities were adopted, Mr. Maccabe illustrated the system of the Southern Railway at Norfolk, which, he said, was perfect, and also paid a high compliment to the Illinois Central terminals at New Orleans. In an interview he said:

"What is needed most of all is proper storage, where cotton can be placed after taken from the river barges and the railroad trains to await the steamer to carry it to foreign ports. There are practically no storage-houses here for cotton, and the shippers bring in their large and handsome bales and unload them on the wharves, where they lay for, sometimes, weeks waiting for a steamer, with no other covering than an old and wornout canvas, and sometimes not even that much.

"For many years Europe has looked to America for her bulk of cotton, and as there is no other country that can compete with America in this product, we have to take the article as it is sent us without a complaint. But I believe when the people of New Orleans, the point from where so much cotton is shipped, especially to England, come to understand the importance of giving this question proper attention, they will build sheds and storehouses along the wharves of the river, and the insurance companies will no longer be compelled to bear a 40 per cent. loss on their premiums on account of damaged cotton.

"New Orleans is destined, in my opinion, to become a great shipping center of all Western products to European ports, and if the merchants are only far-sighted enough to construct proper shipping facilities for the care of grain and produce, they will reap a rich return in the near future. When the merchants and shippers of any place come to understand the fact that New Orleans, or New York, or Galveston are able to take care of their shipments with proper storage, you will find that the port that has the best shipping facilities and warehouses will be the port to get the bulk of the trade.

"I expect to confer with the leading merchants and shippers in New Orleans regarding this matter, and use my best efforts in accomplishing the desired end. By so doing the merchants and shippers and insurance companies will be mutually benefited. The leading cotton merchants in England are waiting the result of my visit, and to speak frankly, the rates of insurance will be largely determined on what I accomplish here."

New Orleans and Copenhagen.

Mr. F. Soegaard, one of the Danish representatives in this country, has done much to attract the attention of exporters of the United States to the commercial importance of the countries along the North sea. He has enlisted the attention of firms in Chicago, Kansas City and other Western communities to such a degree that a number of large shipments have been made from these points to Copenhagen. The work of Mr. Soegaard

has been referred to from time to time in the Manufacturers' Record, while the advantages of Copenhagen as a free port have also been dwelt upon. Mr. Soegaard has recently been in New Orleans with the same object in view. He is advocating a visit to Copenhagen by representatives of the American press and representatives of New Orleans commercial bodies to investigate for themselves the extensive market which that country presents for export business. Referring to the possibilities of New Orleans, Mr. Soegaard stated in a recent interview:

"The field that it draws from is immense—the whole middle West, the Southwest, the Southeast, the great Mississippi valley, the richest sections in the whole country, in fact. Let New Orleans wake up and startle the New York merchants. New York has competition that could not possibly be had here. Boston, Philadelphia, Baltimore, Newport News all divide her trade. Here we have a clean sweep, and the fact should be realized. Let the commerce be carried on both ways. Let your lumber merchants, your hardware merchants, your dealers of every kind send their supplies to Copenhagen. We will take care of them. We will see that they are exhibited and secure the most reliable agents in the country to present them before the people of Denmark. We will attend to all this for them, if they send over their wares and samples. The trade that is going on comes as a matter of course. How immense, how powerful, how thriving it could become if the ball were but started rolling and the commerce between these two countries placed upon a footing that it deserves."

Port Chalmette Improvements.

In a recent issue of the Manufacturers' Record reference was made to a visit of a party of capitalists interested in Port Chalmette, La., who examined the place and its suburbs, it is stated, with a view of making an investment. It is now reported that these parties, some of whom are bondholders in the New Orleans & Western Railroad, are in favor of investing about $300,000 in additional terminals at Port Chalmette, which will include several warehouses, additional railroad tracks, while it is possible more attention will be given to the river business of the company by the purchase of a light-draft steamboat to carry cotton and other freight. Mr. C. B. Vannostrand, vice-president of the company, is taking an active interest in the movement and accompanied the party on their visit of inspection. They included C. A. Williams, New London, Conn.; Charles R. Leaycroft, merchant, New York city; Wm. Church Osborne, general counsel of the New Orleans & Western Railroad, New York; Samuel P. Colt, president of the Industrial Trust Co. and United States Rubber Co., Providence, R. I., and S. B. Brownell, attorney, New York city.

Coal at Newport News.

The first barge of the newly-organized Atlantic Transportation Co., recently described in the Manufacturers' Record, loaded with coal at Newport News last Friday. The contract between the company and the Chesapeake & Ohio Railroad calls for 2,000,000 tons of coal annually for five years. The Newport News Press, speaking of the matter, says:

"At present the Chesapeake & Ohio dumps about 2,000,000 tons of steam coal a year. The new contract will swell the figures to about 4,000,000 tons, making Newport News easily the largest and most important coaling station on the Atlantic coast and second only to Cardiff, Wales, among the coal ports of the world. The coal which the Chesapeake & Ohio will dump here under the terms of the contract comes from the New River and Kanawha mining districts in West Virginia. It will not be necessary for the Chesapeake & Ohio to purchase any new coal gondolas to fill this order, as it now has an abundance of cars and plenty of track space."

To Complete the Canal.

The Kansas City, Pittsburg & Gulf Company has secured the consent of the government to complete its ship canal in Sabine lake. The canal, which is to be constructed to the docks at Port Arthur, Texas, it is expected will be finished by January 1. By means of this canal trainloads of export products can be placed on shipboard without the use of lighters and other means of transferring, thereby avoiding such extra expense. The canal will be at least twenty-six feet in depth, which will allow large-sized freight steamships to come directly to the docks and load. The Kansas City Board of Trade and other commercial organizations have taken considerable interest in the matter, as they realize the advantage of having an exporting point so near the city as Port Arthur.

Jottings at the Ports.

The Dutch steamship Coelana, recently cleared from Galveston, Texas, for Rotterdam, Holland, with a miscellaneous cargo. This vessel has been placed in the regular service between these ports, and it is understood more Dutch steamers are to be added to this fleet.

The movement of passengers from Europe to Southern ports is steadily increasing. The steamship Olinda, of the Diederichsen Line, recently arrived at Galveston from Antwerp with seventy-four steerage and other passengers. This is the largest number of passengers yet landed at Galveston. Most of them would have come to America by way of New York and other Northern ports were this line not in operation.

The coffee trade between New Orleans and Mexico is rapidly increasing. One of the companies carrying on this business is the Grijalva Land & Coffee Co., which has a line of vessels in operation between its plantations and this port. A representative of the company is now in New Orleans with the view of purchasing a steamship and several barges for its use. It controls several plantations in the most fertile part of Mexico.

With its March number the Journal of Commerce of Providence, R. I., a publication of authoritative accuracy, begins to distribute advance pages of the "United States Commercial Directory for Use in Foreign Countries," printed in English, German, French and Spanish. The Journal of Commerce containing these advance pages will be mailed to all the United States consulates each month and will be placed on file and serve as the directory proper until the work is completed, when bound volumes will be placed on file in every city of the world for public use wherever the United States are represented. They will also be on sale in every commercial center of every country. The work, which has been highly commended by representatives of the United States at Yokohama, London, Lyons, Barcelona, Berlin, Quebec and Calcutta, will contain only the names of manufacturers of goods that are in demand outside of the United States.

Mr. Edward Atkinson, of Boston, has accepted an invitation to make an address on industrial questions before the Atlanta Chamber of Commerce on April 14.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

Knoxville's Street Railways.

In last week's issue of the Manufacturers' Record reference was made to the important part in which Messrs. Hambleton & Co., of Baltimore, have taken in railroad and financial enterprises in the South. Largely through its influence the street-railway systems of Knoxville, Tenn., have recently been consolidated and placed in the hands of a company which includes Baltimore and Knoxville capitalists. The railways comprise about twenty-five miles of line operated by electric motors. The company now in control is to be known as the Knoxville Traction Co. It has absorbed the Knoxville Street Railway & Light Co., the Citizens' Street Railway and the West End Street Railway companies. The price paid for the property was $881,500. The company will have a capital of $750,000, and will issue bonds to the amount of $850,000 on the entire property. These bonds will bear interest at the rate of 5 per cent.

Mr. Frank S. Hambleton, of the firm named, has been instrumental in negotiating the transaction, and the result is in a large measure due to his efforts. The Baltimore Trust & Guarantee Co., through C. W. Baer, its secretary, and John N. Steele, of the legal firm of Steele, Semmes, Carey & Bond, of Baltimore, have also been active participators.

The officers of the Knoxville Traction Co. are: President, Frank S. Hambleton; vice-president and general manager, C. C. Howell; treasurer, W. S. Shields; secretary and auditor, C. H. Harvey.

The directors and officers of the Knoxville Electric Light Co. were named as follows: President, Frank S. Hambleton; vice-president and manager, C. C. Howell; treasurer, E. G. Oates; secretary and auditor, Charles H. Harvey.

Mobile & Ohio's Model Trains.

The Mobile & Ohio Railroad Co. has begun a train service between Mobile and St. Louis which will be highly appreciated by the traveling public. The trains are of the vestibule pattern, and have all the modern conveniences. The exterior color of the cars is a dark olive, the Pullman palace car standard color, striped and lettered in gold. The window sashes and door frames are finished in natural woods. The cars are full vestibuled throughout, and all the end rails and outside hardware and metal finishings are of polished brass. The interiors of the cars are finished in polished quartered oak and have continuous brass parcel racks running the full length of the car. They are equipped with Hale & Kilburn reversible seats, wide enough to give ample sitting room, making a most comfortable seat. The cars are lighted with gas throughout, the vestibules also being lighted, and are heated by steam on the same plan as the latest Pullman sleeping cars. One of the most important features in these cars for modern travelers is a commodious smoking-room containing seven plush-covered cushioned seats with arms. In addition to this, the cars also contain elegant lavatories and toilet-rooms, richly appointed, and ice-water tanks.

Important Texas Line.

According to a dispatch from Beaumont, Texas, the Gulf, Beaumont & Great Northern Railroad Co. has been organized to carry out the extensions of the Gulf, Beaumont & Kansas City Railroad, outlined some time ago in the Manufacturers' Record. The extensions comprise a line to Sabine Pass, which is also a terminus of the Kansas City, Pittsburg & Gulf system, and an extension to Lufkin, Texas, where connection will be made with the St. Louis Southwestern. This would give the latter, which is one of the largest railroad combinations in the Southwest, a line direct to Sabine Pass and a terminus on tidewater.

The new company, which is capitalized at $600,000, includes the principal stockholders of the Gulf, Beaumont & Kansas City, and will absorb this line, which is now in operation between Beaumont and Kirbyville, Texas, a distance of sixty-two miles. Mr. John H. Kirby, of Houston, Texas, is president of the company. It is understood that surveys will be made for these extensions immediately.

To Be Reorganized.

A New York dispatch announces the issue of a plan for the reorganization of the New York, Philadelphia & Norfolk Railroad. It contemplates foreclosure of the property and the formation of a new company, capitalized at $4,000,000, in shares of $50 each. The $1,714,375 of assented stock will be assessed 15 per cent. and the non-cumulative 6 per cent. income bonds 35 per cent. There will be a new mortgage issued, with $3,000,000 4 per cent. bonds, of which $2,500,000 will be issued for existing 6 per cent. first lien bonds, with a bonus of 10 per cent. in new 4s or in bond scrip. A new second mortgage will be created to secure $10,000,000 4 per cent. non-cumulative income bonds. An underwriting syndicate will be formed to take all non-assenting stock and income bonds and to pay the assessments thereon, and to take at par all first mortgage 4 per cent. bonds not exchanged for the present first mortgage 6 per cent. bonds.

A Possible Combination.

A party of officials of the Kansas City, Fort Scott & Memphis, also the Kansas City, Memphis & Birmingham railroads, have recently visited Pensacola, Fla., to inspect its harbor and other facilities. They were induced to make the trip by Henry McLaughlin, who is promoting the Pensacola, Alabama & Tennessee Railroad. This line, if completed, would form a natural outlet to the seacoast for all the railroads mentioned, which at present have no tidewater connection, terminating at Birmingham, Ala. Mr. McLaughlin has been working on these plans for several years and has secured the right of way for a considerable distance and organized a company to build a portion of the line in Florida and Alabama. By extending it as far as Birmingham a connection would be made with the lines referred to, which are under one management.

Open for Traffic.

The branch of the Mobile & Ohio between Columbus, Miss., and Tuscaloosa, Ala., has been opened for traffic and trains are now running over it. This is a portion of the line which the Mobile & Ohio is building to connect Montgomery, Ala., with its main system. Work is rapidly progressing on the branch, which, when complete, will give the Mobile & Ohio a connection with the Plant system, also the Georgia & Alabama Railroad, at Montgomery.

A Louisiana Road.

The Louisiana Construction Co., which has the contract for constructing the Red River Valley Railroad, has completed the first section of this line, which is thirty miles in length and is now in operation. It extends from Shreveport to Loggy

bayou. The road is to be built from Shreveport to Coushatta, along the Red river valley. Clarence Ellerbe, president of the company, informs the Manufacturers' Record that it is expected to let contracts for about twenty miles of the grading on May 1. The company is also ready to purchase rails. The road will be of much importance in opening up the northwestern section of Louisiana and will eventually form part of another system between Louisiana and the Northwest.

Advertising by Lectures.

The Southern Railway Co. has hit upon a plan for advertising the country along its route, and the South in general, which will undoubtedly be very popular. Under the auspices of Mr. Alex. S. Thweatt, Eastern passenger agent, the scheme is being worked of exhibiting by illustrated lectures the beauties of the section reached by the road and its branches, the lectures being given in the principal cities of the East and New England. The lectures also show what the South is doing in cotton manufacturing, a feature of considerable interest to the dwellers in the East. The idea is a good one, and will doubtless be copied when it becomes more generally known and its success appreciated.

An Automatic Coupler.

A patent coupler is being tested successfully on the Atlanta & West Point Railroad which may possibly revolutionize the present method of connecting cars in trains. It is an automatic coupler, and by its use steam pipes and air hose can be connected by the contact of the cars. It is unnecessary to use the hands in fastening or adjusting. When the cars are to be separated the pipes are disconnected as soon as the iron coupling is released. A series of heavy springs are used in operating the device, and it is stated that any kind of an "M. C. B." coupler can be used in connection with it.

Women as Railway Employes.

The Baltimore & Ohio Railroad Co. has eighteen women in its employ as station agents, and the superintendents are very much pleased with the way in which they perform their duties. These women act as both freight and ticket agents, and it is said in their favor by the traveling auditors that their accounts are always perfectly straight.

Railroad Notes.

H. J. O'Neil has been appointed commercial agent for the Rock Island system at New Orleans.

J. F. Bayles has been appointed soliciting freight agent of the Seaboard Air Line, with office at New York.

Mr. R. S. French has been appointed commercial agent of the Chesapeake & Ohio Railroad Co. at Charleston, S. C.

K. Flemming, of Kansas City, has been appointed general baggage agent of the Kansas City, Pittsburg & Gulf system.

It is reported that the Union Pacific Railroad Co. has ordered 2000 freight cars of the Missouri Car & Foundry Co., of St. Louis, Mo.

Ellis Farnsworth, of Chattanooga, Tenn., has been appointed general traveling agent of the Missouri Pacific, with headquarters at Memphis, Tenn.

Mr. C. W. Bein, of Houston, Texas, has been appointed traffic manager of the Southern Pacific system at New Orleans, succeeding the late J. G. Schriever.

W. F. McClure has been appointed general freight and passenger agent of the Galveston, Houston & Henderson Railroad Co., succeeding H. W. Downey.

Edward Ford has been appointed superintendent of the Alabama & Vicksburg division of the New Orleans & Northeastern Railroad, succeeding W. W. Bond.

The Southern Pacific and Houston & Texas Central Railroad lines are preparing for extensive shipments of live stock, and it is stated have secured 1000 additional cattle cars for this purpose.

The Nashville, Chattanooga & St. Louis is preparing to equip its engines with electric headlights, and with that end in view has already furnished one of the engines which makes the run between Nashville and Atlanta with an electric headlight.

A dispatch from Spring City, Tenn., is to the effect that C. O. Godfrey, who is understood to represent the Niedringhaus Bros., of St. Louis, Mo., purchased the Tennessee Central Railroad when it was sold by order of the court. This has no connection with the uncompleted line of the same name, but extends from Spring City to Grand View, and is a narrow-gauge line.

According to a dispatch from Sheffield, Ala., the Southern, the Louisville & Nashville and the Northern Alabama railroad companies have practically decided to construct a union passenger depot in that city at a cost of about $10,000. Plans have been completed, and it is understood that work will begin within a few weeks. The necessary tracks have already been constructed to the site.

Industrial News from Birmingham.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., April 5.

The prospect for war seems to absorb more of public attention than the outlook for business commands. But as the one is to a great degree dependent upon the other, it is only natural that so vital an issue should command the most serious consideration. Practically there is no business in iron. Its volume is so insignificant as to be "not worth mention." That being the case, quotations are reported as nominally unchanged.

There has been a large deal in coal lands in Walker county, involving about 12,000 acres, by which several interests are consolidated into one interest and under one management. Beyond this there is no significance in the transaction. The trade is simply in a good, healthy condition and on the alert for any considerable demand that circumstances may develop.

Affairs at the rolling mills and other large interests are active, but this is largely due to orders already booked. New business seems to be in a state of suspense, and the same shadow now hangs over several matters that were planned and had every prospect for a successful inauguration.

The minor industries are yet active, and if new orders were to suddenly cease, they would be busy on their old orders for some time yet. The matter is tersely given by the statement that much concerning them depends on the issue of peace or war. But few think war will bring any material benefit to them, and consideration of action to their best interests occupies much thought. J. M. K.

The annual convention of the National Association of Credit Men will be held at Detroit, Mich., on June 22, 23 and 24.

The Mount Vernon Mills, of Woodberry, Baltimore, Md., has received an order from the United States government calling for a large quantity of cotton duck, presumably to be used in the manufacture of tents for the army. It is said that the company will have to operate a night force in order to deliver the goods as promptly as the government desires.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

THE NEXT COTTON CROP.

Planters Advised to Restrict Their Planting.

Advice continues to be offered to the cotton planters by men who have opportunities to view the market against a repetition of the big crop of the past season. Among the latest utterances on the subject is that of the Allen-West Commission Co., of St. Louis, Mo., who say:

"Cotton-planting time has arrived. Will you make enough cotton this year to reduce the price next fall to three cents a pound in the big markets? That price will hardly pay for picking, ginning and freighting. Remember, the buyers and manufacturers care nothing for the cost of production. They, like others, will buy as cheaply as possible; and if you make another big crop on top of last year's immense crop, they can and will force the prices down very, very low. As we have been explaining in our circulars for years, if every farmer should make three bales of cotton, instead of four, the three would bring more in dollars and cents than four. Then why make the extra bale, that actually costs you cash money besides the labor, wear and tear of land, live stock, etc.? Why not use that extra labor to make other things which you really need and which would be profitable and helpful, instead of hurtful? You now have flour and meat to buy. Both are high. You can raise at home most everything you live on if you will. Why not do it? The 3,000,000 extra bales raised last year cost the South $50,000,000 to $100,000,000 actual money, besides giving the manufacturers 3,000,000 bales of cotton that exhausted your land, impoverished your country and worked you hard fifteen months in a year to gather and market. Is not this over-production the height of folly and unwisdom? No other interest acts in this way, except the planters, and for self-protection they should stop it at once."

On this point the Dry Goods Chronicle, of New York, says:

"While there is no evidence that more cotton will be grown in the South this year than in the past, it is yet believed that the new crop will be fully up to the average. This is in itself somewhat of a disappointment. It was hoped that the Southern planter would see the folly of growing too much cotton and too little food product. The low price he has been obtaining for his cotton should have made plain to him that his prosperity would be enhanced by devoting a larger portion of his land to the production of articles for his own consumption. But it has not appeared to do so.

"The trouble is that he reasons on theoretical rather than practical grounds. He assumes, and correctly, that the West can produce corn and hogs cheaper than he can, and that it will be better for him to grow cotton and buy his food products from the West. This feeling is encouraged by the Southern merchant, who has in mind the profit he can make by the sale of these articles.

"The result is that the planter grows more cotton, and the price goes down. The Western food products are cheap enough, but the cotton grower gets so little profit out of his cotton that he can't afford to pay even the prices asked. So he goes in debt for them, and waits for a rise in the price of cotton to enable him to pay them.

"Ready money is a very scarce article in agricultural sections. The farmer who comes the nearest to raising everything necessary for his own consumption will enjoy more prosperity than his neighbor who pursues just the opposite course. When the Southern farmers can be made to realize this, they will not only avoid going into debt for such things, but get a better price for their cotton as well."

New England Manufacturers.

The annual meeting of the New England Cotton Manufacturers' Association will be held in Boston on April 27 and 28. The programme will include papers upon the following subjects: "The New Roller Gin," "Improved Methods of Baling Cotton," "The Round Bale," "Flax Manufacture by Cotton Mills," "Southern Cotton Mills and Manufacture As Seen by a Northern Man," "Improvements in Pickers," "The Ring Traveler," "Steaming Filling," "Slashing," "Take-up Motions on Looms," "The Shuttle Shifting Loom," "Cotton-mill Costings," "Early Inventions Upon Copper Printing Rolls," "Our Export Trade in Cotton Goods," "Cotton Manufacturing in Mexico" and "What I Don't Know About a Cotton Mill."

The Cotton Movement.

In his report for April 2 Secretary Henry G. Hester, of the New Orleans Cotton Exchange, details the cotton movement for the seven months of this season ended March 31. The amount of crop brought into sight was 10,212,709 bales, an increase of 2,199,215; exports 6,214,828 bales, an increase of 1,195,414; takings by Northern spinners 2,026,848 bales, an increase of 539,774; by Southern spinners 799,395, an increase of 39,032.

For Smaller Bales.

The Galveston Maritime Association has taken up the question of improved cotton bales, and through its president, Mr. B. Adoue, has issued an address to the cotton interest of the State. This address includes the resolutions adopted by the Interior Compress Association for gin boxes 24x54 inches in size. The Galveston Association also favors the use of at least 2½-pound bagging, with 1½-pound ties, for the bales.

Textile Notes.

Mr. S. W. Bogy, of Corsicana, Texas, has a proposition from New York parties for the erection of a cotton mill; stock company, with $500,000 capital, is proposed.

The Jonesville Knitting Mills, of Jonesville, S. C., contemplates adding some new machinery to its plant. Estimates are now being secured on four or more automatic half-hose knitting machines, and they will doubtless be installed soon.

The Victoria Cotton Mills, of Rock Hill, S. C., has been incorporated, with capital stock of $75,000, to succeed the Globe Cotton Mills, a plant of 9000 spindles and 320 looms. The incorporators are Messrs. W. L. Rodey, A. Friedheim, A. F. Ruff, R. T. Fewell, A. E. Smith and J. R. London.

It is said that Mr. F. M. Perry, of Florence, Ala., has completed the purchase of a tract of 1100 acres of land near Florence, which he intends to use as the site for his proposed $100,000 cotton mill. It is proposed to have the mill in readiness to operate upon next season's cotton crop. Mr. Perry cultivates about 14,000 acres in cotton in Lauderdale county.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, N. Y., April 5.

The market for crude oil during the earlier part of the week continued dull, but, with an improvement in lard, firmness and considerable activity prevails at this writing. The packing and soap trade are showing increased interest in the article, while, on the other hand, refined is dull and uninteresting, the uncertain outlook with regard to the tension between this country and Spain adding further obstacles to trading. Concerning refined, however, notwithstanding the political uncertainty, considerable inquiry prevails for April and May delivery, apparently to cover old short sales. In this respect it must be admitted that the possibility of France imposing an increased duty on cotton oil proves a barrier to new business of a substantial nature with that country. As already intimated, lard evinced an upward movement during the week, 5.15 cents being quoted, May options, Chicago. This was at once reflected in the improved demand for crude oil by refiners for compound lard purposes, and important sales were effected of bulk, direct from the mills, at prices herewith quoted. Tallow shows no improvement and is quoted at 3 9-16 cents, the market tending to weakness. Prime yellow is selling ex-dock at 22 cents, although to 22½ cents is asked. The demand for the higher grades of oil is somewhat better, but buyers and sellers are apart in their views, which precludes the activity which would otherwise prevail in these grades at this time. With the cessation of active mill operations, together with the continued improvement in lard, it is reasonable to expect that cotton-oil values cannot long remain at their present low basis. Liverpool refined oil is quoted steady at 15s. 6d., although Egyptian cottonseed is 2s. 6d. per ton lower in price, or at £4 15s. The following are closing prices at this market: Crude, 19½ to 20 cents; crude, loose f. o. b. mills, 14½ to 15½ cents; summer yellow, prime, 22 to 22½ cents; summer, off grade, 21½ to 22½ cents; yellow, butter grades, 24 to 26 cents; white, 25 to 25½ cents; winter yellow, 27 to 28 cents; salad oil, 29 to 30 cents, and soap stock, ½c. to ⅝c. per pound. The latter article is in fairly good demand. Receipts at this market have been less than during any previous week this season, 2560 barrels, while exports aggregated 3560 barrels. Most of the mills in Texas are reported closed, and a number Atlantic coast mills have also closed down, while seed supplies in the valley are rapidly diminishing, oil production in that section being correspondingly decreased.

Cake and Meal.—At the mills and shipping points the market is firm, scarcity being a feature in some cases. Feeding stuffs abroad lack buoyancy and sales are effected usually in buyers' favor.

Cottonseed-Oil Notes.

The Floresville Oil & Manufacturing Co., of Floresville, Texas, amended its charter last week so as to increase its capital stock from $20,000 to $50,000.

The Mississippi Cotton Oil Mills Co., of Jackson, Miss., will double its capacity during the coming summer months. Its present capacity is 150 tons per day, and the object is to make it 300 tons.

Mr. Henry Bond, secretary of the Chattanooga Cotton Oil Co., returned from Memphis last week, where he secured an excellent site and let the contract for the new cottonseed-oil mill of the company. The mill will be built at once.

Cottonseed products in Texas are steady, with no material change in values. Prime crude oil, loose, is quoted at 14½ to 15 cents per gallon, and prime summer yellow oil is offered at 16½ to 16¾ cents; cottonseed cake and meal, $15 to $16.50 per short ton; linters, 2½ to 2¾ cents per pound. The above prices are f. o. b. mill at interior Texas points.

There is no change in the market for cottonseed-oil products at New Orleans, and the list of values is about steady, with a moderate demand both foreign and coastwise. Cottonseed, $7 per ton of 2000 pounds net to the mills, no commission of any kind to be added; cottonseed meal, jobbing per carload at depot, $17 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., $19.25; oilcake for export, $19 to $19.25 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, strictly prime oil, crude 15½ cents loose f. o. b. tanks at Mississippi valley points; in barrels, 18 to 18½ cents; cottonseed hulls delivered per 100 pounds, according to location of mill, 12 to 17½ cents; linters, according to style and staple—A, 3½ cents; B, 3⅛ cents; C, 2⅝ to 3 cents; ashes, none; refined cottonseed oil, prime in barrels per gallon at wholesale or for shipment, 21½ to 22 cents for export.

West Virginia Coal Lands.

Pennsylvania parties have become interested in coal lands in Clay county, and a correspondent of the Manufacturers' Record at Charleston, W. Va., states that they may purchase about 100,000 acres in coal and timber lands in this section of the country. The property is located near Clay C. H., and adjacent to the Charleston, Clendenin & Sutton Railroad.

The importance of the coal-mining industry in this State is shown by the last annual report of the State mine inspector. It shows that coal is mined on a commercial scale in twenty of the fifty-five counties of the State. Two hundred and fifteen firms are operating mines. Total number of tons of coal from commercial mines for the year, 11,571,900; estimated tons from small mines, 133,929; for 1896, 125,000, an increase of 8929. Number of tons of coke manufactured, 1,374,497. Total values of coal at the mines for the year, $8,229,198; total values of coke at the ovens, $1,718,121.25 for 1897.

Mr. H. Zech, of Zech & Co., who owns a large lumber mill at Ellis Junction, Wis., and J. H. Grimmer were in New Orleans last week and are looking over the valuable timber lands of Alabama, Mississippi and Louisiana. All desirable timber lands discovered in their tour will be purchased to the extent of 100,000 acres. The company is desirous of getting a good location for its mill, which will be removed from Wisconsin to the South. The capacity of the company's plant will be 75,000 feet a day.

It is estimated that the coal trade in Alabama will be more active than usual this month. The Birmingham News says that the Illinois Central Railroad, for instance, which last year was taking from six to eight cars of Alabama coal a day at this season, is taking from fourteen to sixteen cars of coal per diem now. All the railroads are kept busy moving freight, and consequently use a larger amount of coal than is usually the case this time of the year.

Messrs. Risheill & Co., of Alexandria, Va., want to correspond with manufacturers of chair stock.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., April 7.

The movement in phosphate rock continues moderate and prices are steady, in sympathy with the tone in other fertilizer ingredients. Sales during the week have been better than usual. Reports from points of production continue favorable, and in South Carolina river miners are working more vigorously and the market is in better shape, the demand from domestic sources being active. Shipments from Florida ports last month were fair, Fernandina making a record of about 20,000 tons to foreign ports. In Tennessee the work of development is unusually active and there is a good domestic demand, while the foreign inquiry gives promise of being quite decided in the near future. The following charters were reported last week in the New York market: British steamer Zoe, 1437 tons, from Fernandina to Antwerp with phosphate rock at 17s., April; British steamer Acacia, 1538 tons, from Fernandina to Stettin with phosphate rock at 18s., April-May; British steamer Edinburg, 1041 tons, from Sicily to Charleston, S. C., with sulpher at 7s.; German bark Matador, 1438 tons, from west coast South America to Hampton Roads for orders with nitrate at 22s. 6d., less one-third direct, April, and Danish steamer Peter Berg, 1148 tons, from Fernandina to Aarhuus with phosphate rock at 17s. 9d., April-May.

Fertilizer Ingredients.

There is a good demand for ammoniates, principally from Eastern buyers, and the market is fairly active, with values not materially changed. The demand from Southern sources continues light. In the West values are firm, with stocks somewhat reduced. Messrs. Thomas H. White & Co., in their circular for March, say: "Prices for ammoniates during the past month have been well supported and current product readily absorbed. The output of manufactured fertilizer in the South is larger than expected, and many manufacturers have been compelled to buy additional supplies of crude materials. There is more confidence than usual at this season of the year in the future stability of prices and four or five contracts of high-grade tankage for delivery over the ensuing six or twelve months have been closed."

The following table represents the prices current at this date:

Sulphate of ammonia (gas)	$2 60	@	——
Nitrate of soda	1 75	@	1 80
Blood	1 72½	@	——
Hoof meal	1 65	@	——
Azotine (beef)	1 77½	@	——
Azotine (pork)	1 77½	@	——
Tankage (concentrated)	1 67½	@	——
Tankage (9 and 20)	1 70	and	10
Tankage (7 and 30)	15 00	@	15 50
Fish (dry)	20 00	@	——
Fish (acid)	12 00	@	——

Phosphate and Fertilizer Notes.

The board of directors of the Virginia-Carolina Chemical Co., of Richmond, Va., on March 25 declared a quarterly dividend of 2 per cent. on the preferred stock of the company for quarter ending March 31, 1898.

It is stated that the Smith Bros., of Alabama, have entered into a contract with the Tennessee Phosphate Mines at Mount Pleasant, Tenn., to remove the dirt from over the phosphate for mining purposes. The contractors are now on the ground and ready to commence operations.

The O. A. Smith Guano Works, four miles from Atlanta, on the Western & Atlantic Railroad, was partially destroyed by fire on the 2d inst. The building in which were the acid chamber and machinery is a complete loss, aggregating over $75,000. The building was insured for $65,000.

It is stated that the phosphate industry in South Carolina shows a marked improvement over last year. River miners are all at work and are at present taking out from 10,000 to 12,000 tons of rock a month. The Coosaw Company has been at work for some time past, having two dredges employed. The Central Phosphate Co. is very active and has virtually disposed of all the rock it can mine during the present year.

The following coastwise shipments of phosphate rock were reported from the port of Charleston, S. C., last week: Schooner George R. Congdon for Newton Creek, N. J., 610 tons; schooner D. J. Sawyer for Richmond, Va., 547 tons, and schooner Talofa for Baltimore, 1615 tons. The total shipments of phosphate to coastwise ports from Charleston since September 1, 1897, amount to 58,996 tons, against 57,312 tons for the corresponding period last year.

Mr. Albert F. Dewey, president of the Charlotte Harbor Lighterage & Stevedore Co., reports the following shipments of phosphate rock from Punta Gorda for the month of March: Schooner D. J. Sawyer for Wilmington, N. C., 540 tons; schooner W. J. Lermond for Baltimore, 1333 tons; schooner Isaiah Hart for Alexandria, Va., 1317 tons, and schooner Vanleer Black for Wilmington, N. C., 873 tons; total, 4063 tons; previously reported, 5805 tons, making a grand total for the quarter ending March 31 of 9868 tons, all pebble and shipped by the Peace River Phosphate Mining Co.

The purchasers of the Castle Haynes phosphate lands in North Carolina organized a corporation last week at Wilmington to be known as the Hanover Land & Improvement Co. The capital stock is placed at $25,000. The following are the officers of the company: President, John S. Armstrong; vice-president, W. H. Chadbourn; secretary and treasurer, Jas. H. Chadbourn, Jr. The company takes charge of the Castle Haynes property and will work the phosphate mines on an extensive scale. A new phosphate mill will be erected to be well-equipped with the most modern appliances for successful preparation of the product for market. The company expects to mine about 100 tons a day.

During the month of March the movement in phosphate rock at Fernandina, Fla., was fairly active, distributed as follows: Steamer Ingram for Rotterdam, 1811 tons; steamer Lowlands for Ghent, 2235 tons; steamer Hexham for Leghorn, 2057 tons; steamer Basuta for Hamburg, 4070 tons; bark Lina for Yarra river, Australia, 1707 tons; steamer Verbena for Stettin, 3323 tons; steamer Thomas Mellville for Kastrup, 2263 tons, and steamer Grandholm for London, 1400 tons, making a total of 18,866 tons; previously reported 17,420, or a grand total for the quarter ending March 31 of 36,286 tons. The estimate for April shipments is placed at 20,000 tons. The following charters for the present month are reported: H. A. Ford, steamers Coquet, Elfie and Linwood; Dunnellon Phosphate Co., steamers King Arthur and Peter Berg; J. Carstens, steamers Airdrishaig, Acacia and Birchton.

North Carolina Granite.

Mr. J. T. Wyatt, of Faith, N. C., writes to the Manufacturers' Record that orders for granite are coming in; that he has received an order for a lot of street curbing for Durham, N. C., and a neighbor has one for 100 carloads of curbing, which are being shipped as rapidly as it can be gotten out.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., April 7.

The tone of the local lumber market continues unchanged and the volume of business for the week under review shows very little expansion. In nearly every avenue of the local lumber industry there is more or less demand, and values are about steady. The market for yellow pine continues fairly active, with receipts quite ample for all requirements. In air-dried lumber boxmakers are buying more freely, and for this class of lumber prices hold very steady. There is very little demand from planing mills and yard men. Kiln-dried North Carolina pine is in good demand from out-of-town buyers, while local wholesale men are buying very sparingly. White pine is in moderate request and prices firm for all desirable material. Cypress is dull and steady. The hardwood trade is reported better, with a good local and out-of-town demand. There is very little foreign business being done at the moment.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE		
5-4x10 No. 2, kiln dried	$12 50@	13 50
5-4x12 No. 2, kiln dried	14 00@	15 00
4-4x10 No. 1, kiln dried	15 00@	15 50
4-4x12 No. 1, kiln dried	15 00@	16 00
4-4 nar. edge, No. 1, kiln dried	12 50@	14 00
4-4 wide edge, No. 1, kiln dried	17 50@	18 50
6-4x10 & 12, No. 1, kiln dried	23 00@	24 00
4-4 No. 1 edge floor., air dried	12 00@	13 00
4-4 No. 2 edge floor., air dried	10 00@	11 00
4-4 No. 1 12-in. stock, air dried	15 00@	16 00
4-4 No. 2 12-inch stock	12 50@	13 50
4-4 edge box or rough wide	8 00@	8 50
4-4 edge box do. (ord. widths)	7 50@	8 00
4-4 12-inch rough	9 50@	10 00
¾ narrow edge	5 50@	6 50
¾ wide	6 50@	7 50
¾x9½ and 10½-inch	7 50@	8 50
Small joists, 2½—12, 14 and 16 long	8 00@	8 50
Large joists, 3—16 long and up	8 00@	9 00
Scantling, 2x3, 2x4 and 3x4	7 50@	8 50
WHITE PINE.		
1st and 2d clear, 4-4, 5-4, 6-4 and 8-4	$47 00@	48 00
3d clear, 4-4, 5-4, 6-4 and 8-4	42 00@	43 00
Good edge culls	14 50@	15 50
Good stock	16 50@	17 50
CYPRESS.		
4-4x6, No. 1	$19 50@	20 50
4-4x6, No. 2	13 50@	14 50
4-4x6, 16 feet, fencing	10 00@	11 00
4-4x6, rough	8 50@	9 00
4-4 rough edge	8 00@	8 50
4-4 edge, No. 1	16 00@	17 00
4-4 edge, No. 2	12 00@	13 00
Gulf, 4-4, Nos. 1 and 2	25 00@	29 50
Gulf, 6-4, Nos. 1 and 2	28 00@	30 00
HARDWOODS—WALNUT.		
5-8, Nos. 1 and 2	$65 00@	75 00
4-4, Nos. 1 and 2	80 00@	90 00
5-4, 6-4 and 8-4	85 00@	95 00
Newell stuff, clear of heart	85 00@	100 00
Culls	20 00@	30 00
OAK.		
Cabinet, white and red, Southern, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4	$30 00@	34 00
Quartered white Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4	53 00@	55 00
Culls	10 00@	15 00
POPLAR.		
Nos. 1 and 2, 5-8	$24 50@	25 50
Nos. 1 and 2, 4-4	28 00@	30 00
Nos 1 and 2, 6 and 8-4	32 50@	33 50
Culls	11 50@	12 50
SHINGLES.		
Cypr., No. 1 h'rts, sawed, 6x20	$6 50@	7 25
No. 1 saps, sawed, 6x20	4 75@	5 00
No. 1 hearts, shaved, 6x20	6 00@	7 00
No. 1 saps, shaved, 6x20	4 75@	——
LATHS.		
White pine	$1 90@	2 10
Spruce	2 10@	2 15
Cypress	1 55@	1 65

Jacksonville.

[From our own Correspondent.]

Jacksonville, Fla., April 4.

The business of this port for the month of March, as reported by the collector of customs, makes a highly creditable showing, and in wood products especially the shipments show a decided increase over those of the month of February. Of the general business for March the record shows that fifty-four vessels entered during the month, of which all but six were coastwise. There were twenty-six entrances of steamers and twenty-two of schooners coastwise. The total tonnage was 47,677, of which 1033 was foreign. The clearances numbered forty-one, of which all but three were coastwise. The tonnage coastwise was 43,027, and foreign 223. During the month of March in nearly every avenue of the lumber industry business was good and the demand for lumber and other wood products very decided. Among the saw mills at this port and adjacent points in the State operations have been uninterrupted and the output shipped as fast as manufactured. Prices for all desirable grades of lumber have been very steady, and for all upper grades values are firm and hardening. During the past month the coastwise exports of lumber amounted to 10,484,000 feet, against 8,096,000 feet for February and 8,688,000 feet for the month of March, 1897. Of the March, 1898, shipments 9,927,000 feet was pine lumber and 557,000 feet cypress. The shipments foreign amounted to 105,000 feet, making the total export for the month 10,589,000 feet. Other coastwise exports amounted to 4,194,000 shingles, 49,650 crossties, 11,800 crates and 1000 cedar logs. The outlook for the present month is considered very promising, and the charters reported during the past week indicate that considerable business will be developed during the next thirty days. The following charters were reported in New York last week: Schooner John S. Deering, 455 tons, hence to New York with lumber at $5; schooner R. D. Speer, hence to New York with lumber at or about $4.87½; schooner Austin D. Knight, 329 tons, hence to Boston with lumber at $5, and schooner George L. Fessenden, 394 tons, hence to Philadelphia with lumber at $4.37½. The shipments by the Clyde Line steamers have been holding up remarkably well during March and the demand for all wood products from the Northern markets will tax their carrying capacity to a greater extent during the present month.

Pensacola.

[From our own Correspondent.]

Pensacola, Fla., April 4.

Among the Gulf ports none, perhaps, show a better volume of trade than Pensacola. Not only is her timber and lumber business one of great importance, but the receipts and shipments of cotton, tobacco, pig iron, phosphate rock, etc., all go to swell the business of the port, showing each month a marked increase in shipments. At this period of the season the timber and lumber business is one of great activity, and everyone connected with the industry is fully engaged. The demand from Great Britain and the Continent, from Central and South America and from domestic ports is now quite pronounced, and among the clearances from week to week are vessels of the largest tonnage going out with full cargoes of wood products. Prices continue about steady, sawn timber being quoted 10¾ to 11¼ cents per cubic foot and lumber from $10 to $15 per 1000 feet. During the past week the following clearances were reported: Bark Medea for Lubeck, 677,463 feet of lumber; bark Burnham Wood for Rio de Janeiro, 1,026,400 feet of lumber; bark Sovoice for the same port, 750,000 feet of lumber; ship Lazarro for Lisbon, 1314 cubic feet of hewn timber, 776,184 feet sawn timber and 19,510 feet of lumber; bark Ferda for Santos, 416,023 feet of lumber, and bark Wilhelm Anton for Rio de Janeiro, 767,682 feet of lumber. Among the charters reported in New York last week were the following: Spanish steamer Madrileno, 2024 tons, from Pensacola to Liverpool with sawn timber on private terms; British steamer Knutsford, 1353 tons, from Pensacola to Greenock or Newport with sawn timber at 110s., April-May; Spanish steamer Pedro, 1892 tons, from Pensacola to Holland with sawn timber at 111s. 3d., May, and British steamer Magda, 1456 tons, from Pensacola to Glasgow with sawn timber at 115s., May.

Mobile.

[From our own Correspondent.]

Mobile, Ala., April 4.

The tonnage movement at this port for the month of March was unusually heavy, and for the quarter ending March 31 there were entered 117,776 tons and cleared 104,310 tons, being an increase for the quarter ending March 31, 1897, of 30,020 tons. In this movement the timber and lumber industry have played a prominent part, and the market at this writing is fairly active, with moderate shipments reported during the past week. The market for sawn timber is a shade easier and when placed upon the market will bring 9½ to 10 cents per cubic foot, 40-foot basis. There is a good demand for cypress at 4 to 8 cents per cubic foot, according to average. Ash of good quality and average girth is quoted 13 to 14 cents per cubic foot. Saw logs are in limited demand at $3.50 to $6 per 1000 feet for prime. Hewn timber when placed upon the market will bring 12½ cents per cubic foot, basis of 100 cubic feet, average B1 good. Contracts are made at 12 to 12½ cents per cubic foot. There is a good demand for lumber from Cuba and Central and South America. Saw mills at this and all adjacent points are fully employed and are generally working up to their full capacity. During the past week 1,265,636 feet of lumber left this port, being distributed as follows: Schooner Stubbs for Cardenas, Cuba, 268,950 feet, and schooner Borden for Matanzas, Cuba, 1254 feet; schooner Pickup for St. John, P. R., 258,895 feet; barkentine Mersey for Buenos Ayres, 714,853 feet; schooner Peerless for Ruatan, S. H., 7062 feet, and schooner Bertie for Burnt Island, Scotland, 14,622 feet of lumber and 43,845 cubic feet of sawn timber. The total shipments of lumber since September 1, 1897, amount to 33,352,321 feet, against 41,266,323 feet for the corresponding period last year. The following charters were reported in New York last week: Schooner Robert A. Snyder, 357 tons, from Moss Point to New York with lumber at $6, and schooner Alice McDonald from Mobile to New York with lumber at $5.75.

Lumber Notes.

During the month of March there was shipped from the port of Darien, Ga., coastwise and foreign, 12,059,098 feet of hewn and sawn timber and lumber valued at $126,645.

The box factory and planing mill of H. W. Bradshaw, located in South Suffolk, Va., was destroyed by fire last week. The loss is estimated at $10,000, with insurance about $5000.

A new woodworking plant was established last week at Ridley, in Southampton county, Virginia, by Messrs. Moore & Tolan, of Suffolk. The firm will manufacture truck packages, boxes, shooks, etc.

The demand at Beaumont, Texas, is at present quite active for crossties, some very large orders having been taken recently. An order was taken last week for 90,000 crossties, or nearly 3,000,000 feet.

Two large saw-mill plants at Darien, Ga., owned by the Hilton-Dodge Lumber Co., together with several houses, were destroyed by fire on the 4th inst. The property was valued at $200,000; insurance not known.

The shipments of lumber from the port of Charleston, S. C., for the week ending April 1, inclusive, were as follows: To New York 668,000 feet, Boston 550,000 feet, Philadelphia 350,600 feet and Baltimore 211,000 feet.

Thomas Daly, of Bristol, Tenn., representing Philadelphia parties, has closed a deal with Peary & Harmon, lumber men at Tazwell, Va., for 2,000,000 feet of lumber. Mr. Daly expects to purchase 3,000,000 feet more in that territory.

The Industrial Lumber Co., of Beaumont, Texas, with plants in Beaumont and Hardin counties, was chartered last week with a capital stock of $100,000. The incorporators are Newton R. Wilson, of Monterey, Mexico, and John M. and Samuel Park, of Beaumont.

The Rippetoe Lumber Co., of Charleston, W. Va., was chartered last week, with an authorized capital of 50,000. The incorporators are W. L. Rippetoe, J. C. Rippetoe and G. A. Rippetoe, of Belva, W. Va., and John L. Dickinson and C. C. Dickinson, of Charleston, W. Va.

The property of the Butters Lumber Co., at Hub, near Wilmington, N. C., consisting of a number of houses and 7,000,000 feet of lumber, mostly cypress, was destroyed by fire last week. The value of the property destroyed is estimated at over $100,000, with insurance about $60,000.

A very long stick of timber was gotten out last week for the Industrial Lumber Co., of Beaumont, Texas, by the Caraway Lumber Co., of Silsbee, Texas. The stick was 20x20 inches and fifty-two feet long. It was a fine specimen of long-leaf pine and was shipped to Mexico to be used in mining.

The lumber business at Fernandina, Fla., during the month of March was fairly active, the shipments for the month amounting to 8,657,606 feet, of which sixteen vessels carried coastwise 7,838,006 feet, including 73,642 crossties. Only three vessels cleared for foreign ports, carrying 819,000 feet.

The receipts of wood products at New Orleans last week were as follows: Lumber, 1,547,500 feet; shingles, 264,000; oak staves, 85,830, and cypress staves, 26,000. The total receipts of lumber from August 1, 1897, to April 1, 1898, amounted to 48,478,200 feet, against 43,345,000 feet for the corresponding period last year.

Messrs. George Arntz & Sons, of Decatur, Ala., whose lumber plant was recently destroyed by fire, are preparing to rebuild their mill on the old site. Temporary buildings are being erected and machinery is being placed which will be employed in sawing the lumber for the new mill. The mill will be in operation in about three or four months.

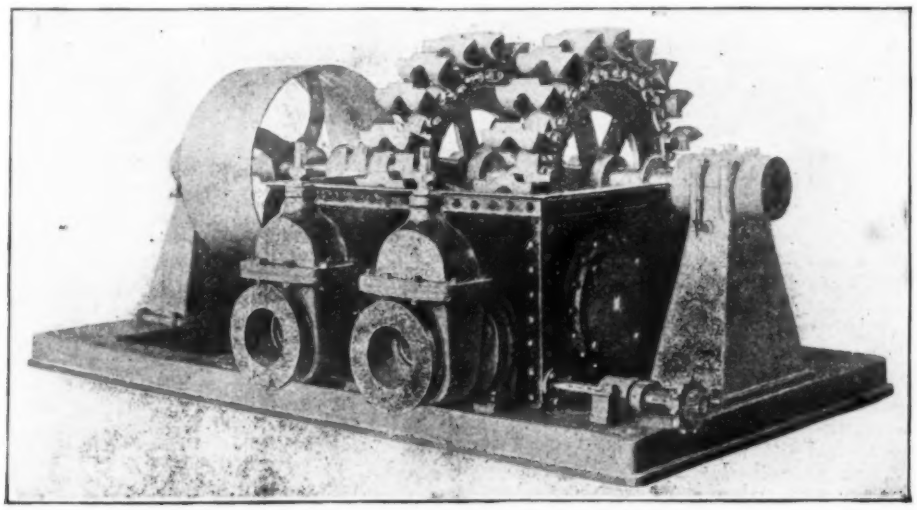
The Hirsch Lumber Co. was incorporated last week at Chattanooga, Tenn., with a capital stock of $20,000. The company will carry on a lumber business chiefly for export, in which foreign capital will be employed. The stockholders are Bukofzer & Co., E. Percy Loomis, of the Loomis & Hart Manufacturing Co., and Julius Hirsch, late of Soldan, Prussia.

Extensive shipments of lumber were made to Northern ports last week from Fernandina, Fla. The Mallory steamship State of Texas sailed for New York with 600,000 feet of yellow-pine lumber from the Yellow Pine Lumber Co. This company has also loaded the schooner Hattie Dunn with 400,000 feet and schooner Zacheus Sherman with 12,000 crossties. J. M. Des Rochers loaded the barkentine Jennie Sunny with 400,000 feet of yellow-pine lumber for New York and the schooner Linah C. Kaminski with 325,000 feet for Philadelphia.

MECHANICAL.

An Interesting Power Plant.

A striking example of the utilization of water-power by wheels of the impulse type is presented in the arrangements recently made for power in the textile mill of M. Benoist Cadet fils, La Bastide, France. A steam engine, which formerly furnished the power for the entire mill, is now held in reserve for periods of low water, and the power is furnished by a 36-inch twin impulse wheel, working under a head of 128 feet at 285 revolutions per minute and developing forty horse-power. The use of contracting nozzles makes a high efficiency possible with the varying loads.



36-INCH TWIN IMPULSE WHEEL.

The illustration shows the wheel sent to La Bastide, furnished by the American Impulse Wheel Co., of New York (120 Liberty street).

The photograph was taken with the top casing removed, and the shape of the buckets peculiar to this wheel can be observed. The design has been carefully worked out and the mechanical perfection attained is admirable.

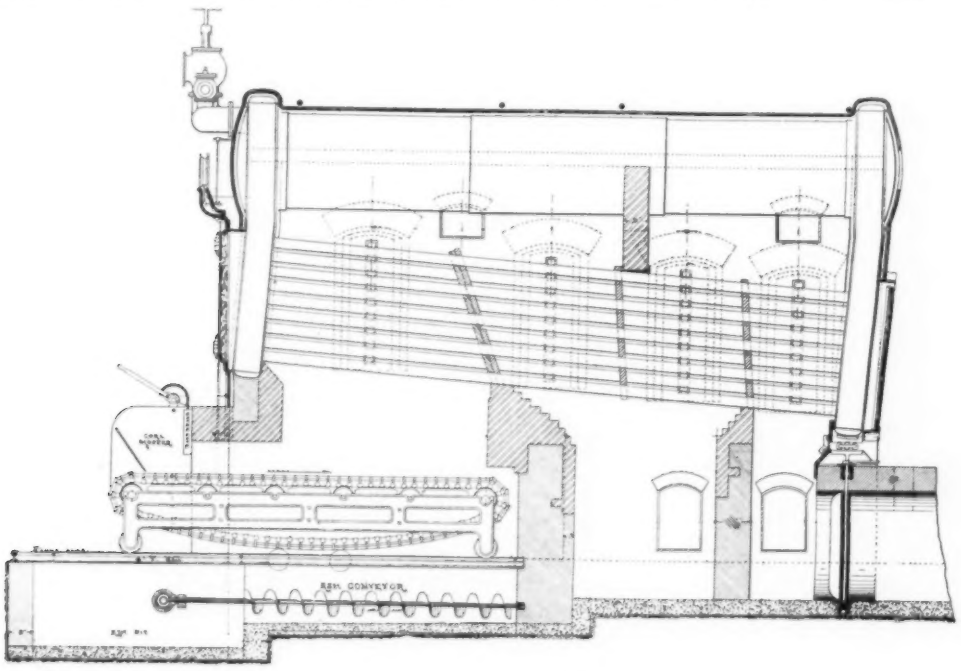
The high efficiency of the wheels made by this company is due to the close attention and study which its engineers give to every detail and to the great care exercised in manufacturing.

The possibilities of the electrical transmission of energy are now so great that many concerns might at comparatively small expense utilize water-powers, even though they were located at considerable distance from their establishments.

The numerous inquiries on such subjects which the American Impulse Wheel Co. receives have the careful consideration of its engineers, and as full information is sent in reply as the data presented will permit.

The Playford Stoker.

The "Playford" stoker is of the chain-grate type. It consists of an endless grate, supported upon a carriage mounted upon wheels, standing upon iron rails, easily removable from underneath the boiler. The grate consists of chains, wrought-iron T irons and small grate-bar sections. The wrought-iron T irons correspond to and are substitutes for the webs of ordinary furnace bars. They are fastened to opposite links of the chains; over them slide the small sectional bars. This construction stands not only the ordinary wear and tear of the boiler-room, but also the abuse that a device of this kind is liable to receive at the hands of firemen. The stoker is provided with a water front, which prevents the coal in the hopper from igniting. An ash conveyor is also provided that delivers the ashes that fall over the rear of the grate to in front of the boiler.



THE PLAYFORD STOKER.

The advantages claimed for this device are: Abatement of smoke, economy in the use of fuel, successful burning of bituminous coal screenings, increased capacity of boiler, attended with increased efficiency, and cost for repairs not greater than the repairs to a hand-fired furnace.

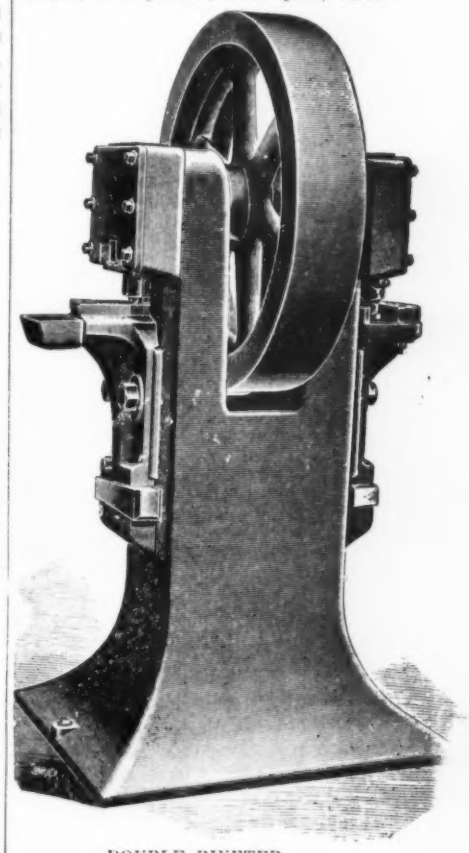
As a proof that the aforesaid claims are not mere assertions, the maker of the "Playford" stoker offers in evidence the official test of the Kansas City (Mo.) Water Works. Two stokers were installed in July, 1897, and have been used daily since their installation; a test was made of the east boiler of the battery, and is submitted for the purpose of showing the uniformity of results as compared with the official test. For copy of test address the Playford Stoker Co., of Cleveland, O., manufacturer of the "Playford" stoker.

Double Riveter.

This machine will cut, punch and rivet iron or steel hoops of all widths and thicknesses, and will therefore take the place of two ordinary machines now used for the same class of work.

On one side of the machine hoops can be cut and punched, and on the other side riveted, or the machine can be made for riveting on both sides or punching and cutting on both sides, thus making a double riveter or double punch and cutter. Where a large amount of work is turned out in a factory, the machine is recommended to be used as a punch and cutter on one side and riveter on the other. The machine is very rapid in its operations.

The band wheel being in the center of the machine gives the machine a good balance and great power to the working parts. The machine is also made to work on one side only. Recommended to go with this machine is a new and latest-improved flaring machine. Fly-wheel, thirty-six inches in diameter, seven-inch face; revolutions, sixty per minute; weight, 2400 pounds; floor space, three feet by three feet; cubic feet, thirty-six; horse-power required, one. For further information address the builder, the E. & B. Holmes Machinery Co., Buffalo, New York.



DOUBLE RIVETER.

Plate and Rod Shears.

The illustration shows a new style of lever shears, recently put on the market by the Niagara Machine & Tool Works, of Buffalo, N. Y. As the name expresses it, these shears are intended for cutting sheets of iron, steel, etc., also for cutting round bars. The cutting knives for the two classes of work are separately arranged, each being constructed with the view to obtain the desired result in the best manner. The straight knives are used for cutting sheets and flat bars. The frame of the machine is shaped so as to allow the split part of the sheet to pass along freely. This gives the advantage that sheets of any length can be cut apart. Round bars are inserted in suitable holes in the frame and cut with circular-shaped knives. The machine is provided with gauges and an attachment to prevent the sheet from tipping while being cut. The knives are ten inches

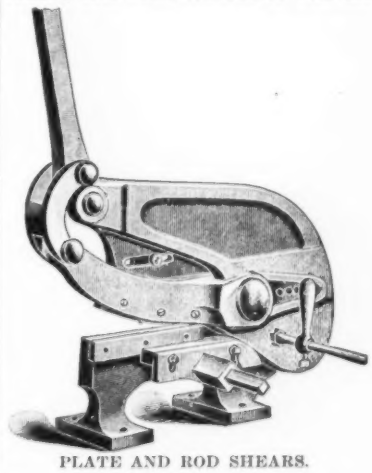


PLATE AND ROD SHEARS.

long. The shears are made of various capacities, and they can be furnished for bench use or set on iron legs.

Feeding Purgers to Boiler.

For the benefit of steam users generally the Penberthy Injector Co., of Detroit, Mich., gives its method of feeding purger to the boiler. The accompanying cut shows the arrangement for feeding either from a barrel or from a cup or tank. When purger is in the form of a powder it should be placed in a barrel and dissolved and fed from a barrel, as shown in

FEEDING PURGERS TO BOILER.

cut. In the case of kerosene oil or other liquid purgers, an ordinary oil cup can be attached, as shown in cut. A regulating cup is not necessary, as any receptacle will answer, so long as valve "B" is tight, by which oil can be regulated. This attachment is applicable to the suction pipe of any injector, it being only necessary to have tight joints to prevent air getting into suction pipe.

Directions.—Close valve "B" and start injector, then open valve to desired feed. Close valve "B" before stopping injector.

The expense of oil attachment outside of cup, which is not necessary, will not exceed fifty cents. A short piece of large steam pipe, reduced to one-quarter inch, will answer as well as the cup "C."

The company used kerosene oil for awhile and nearly ruined its boilers, and claims it is bad; but, if boiler operators will use it, advises the above device.

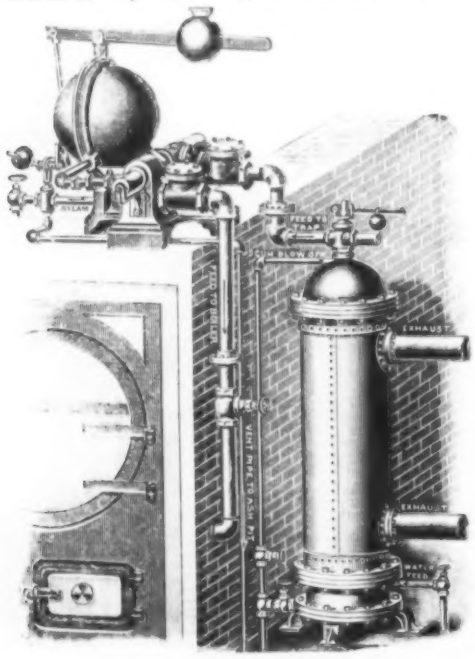
Bundy Gravity Pump.

The Bundy gravity pump feeds water to boilers from either open or closed feed-water heaters, also returns condensation from all sources; will pump cold water noiselessly from city supply, tank or pond, the only requisite being to get the water to the pump, which may be by gravity action or with one pound pressure for each two feet lift.

An interior view would disclose no undescribed parts, as the bowl is absolutely empty. The balance and check valves are of standard make, only heavier and more carefully put together. The full size of opening is maintained from inlet to outlet.

In pumping to an elevated tank compressed air may be used instead of steam, the connection being made the same way. With fifty pounds pressure of either air or steam water may be raised 140 feet, less proper allowance for friction. It may be used for pumping water out of cellars, sewers or for filling water tanks on railroads.

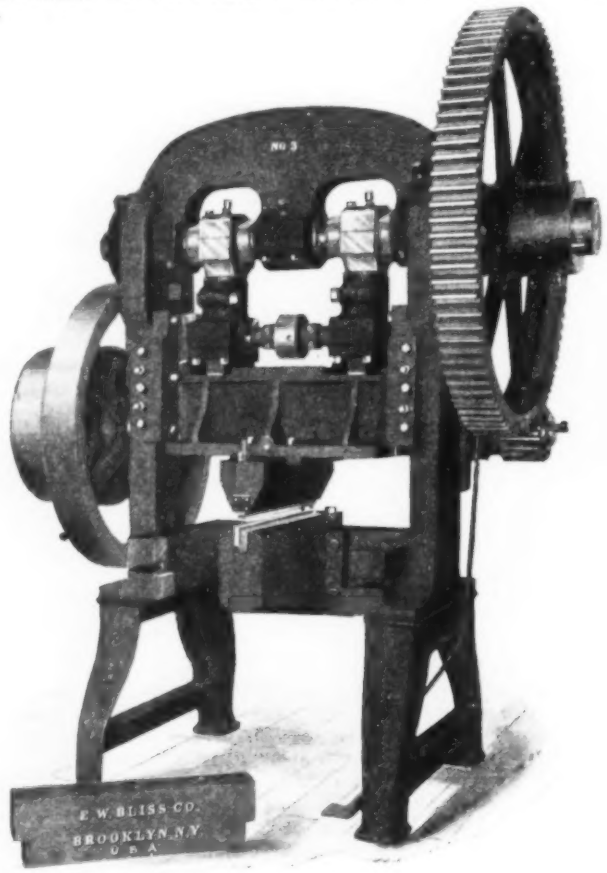
The A. A. Griffing Iron Co., 66-68 Centre street, New York, will furnish any additional information in regard to this apparatus. Send for book.



BUNDY GRAVITY PUMP.

Double Crank Press.

We present illustrations of a double crank press, adapted for nearly all the operations required in the manufacture of sheet-iron and steel goods, such as vapor stoves, pieced tinware, shingles, cornices, stove-boards, etc.; also for operating gangs of punches for rivet holes in tanks, water-pipes, gasometers, kitchen boilers, etc. The cross-head of this press is guided in long, adjustable bearings, so that cutting and perforating dies, as well as others requiring great accuracy of movement, may be operated. It is built either geared or with a fly-wheel. It is also built in an inclined position if desired.



DOUBLE CRANK PRESS.

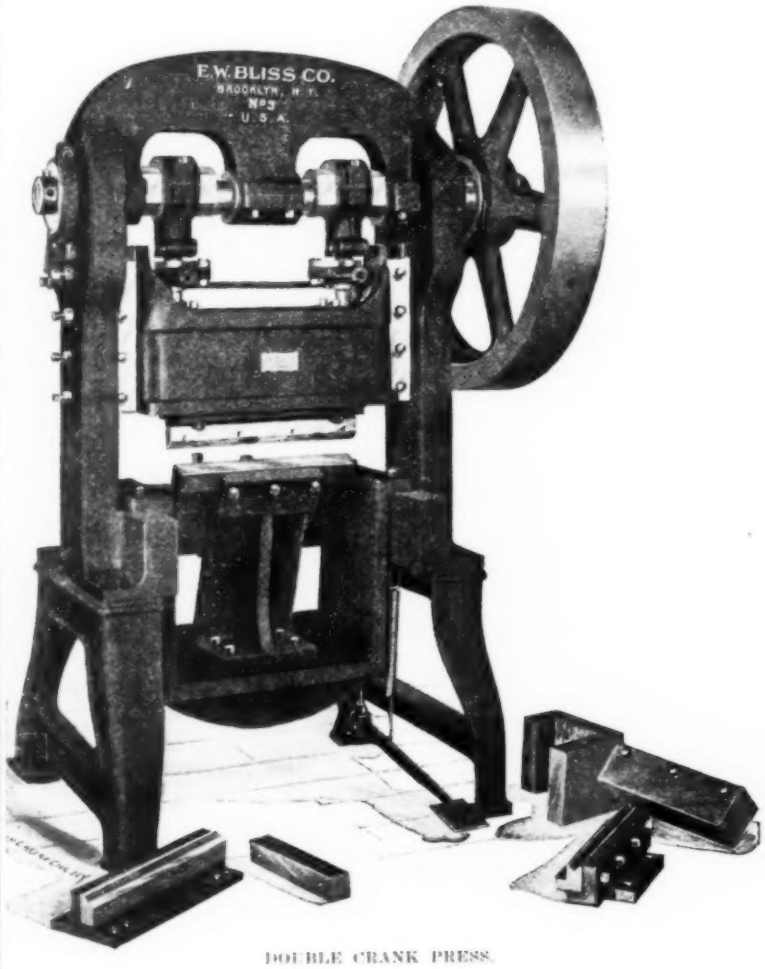
The press has its bed with a movable front piece, which is taken out when the machine is to be used for wiring dies. The front piece is left in place when cutting, piercing, stamping or combination dies are to be used. In this manner the machine may be employed for nearly all the die operations in the manufacture of heavy pieced ironware.

The fly-wheel press, with open front and sunken bolster, is specially adapted for the manufacture of tin ovens, such as are made in connection with gas and vapor stoves. It is also adapted for bread boxes and similar work. The special horns and forces shown are intended for setting down the inside corner seams of oven bodies. The principal dimensions of this press are as follows: Opening in bed 16x28 inches, width between uprights thirty-six inches, standard stroke of slide two inches, maximum stroke of slide four inches, area of die bed 24x35 inches, weight geared press 9000 pounds, fly-wheel press 8000 pounds.

Further particulars may be had by addressing the manufacturer, the E. W. Bliss Co., of 137 Plymouth street, Brooklyn, N. Y.

Lawn Mower and Trimmer.

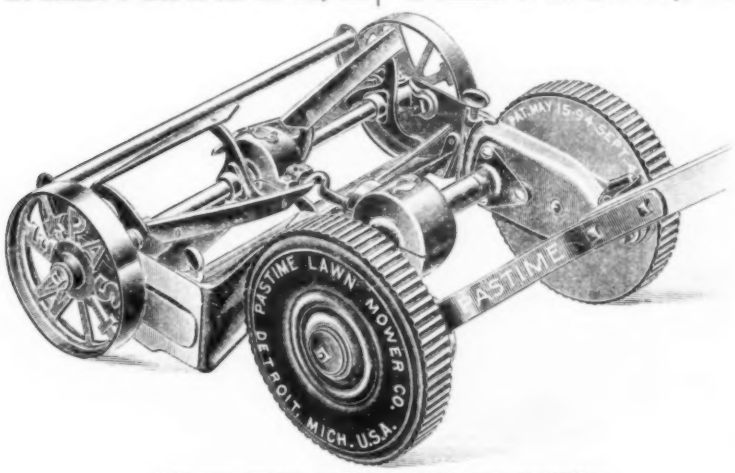
The "Pastime" lawn mower and trimmer incorporates a device by which the forward blades overlap each other in the center and are allowed to pass the center crank driving shaft by a small loop in the same, as shown in cut, which presents itself as each knife approaches it to allow it to pass through the loop. This prevents a ridge of grass being left in the center.



DOUBLE CRANK PRESS.

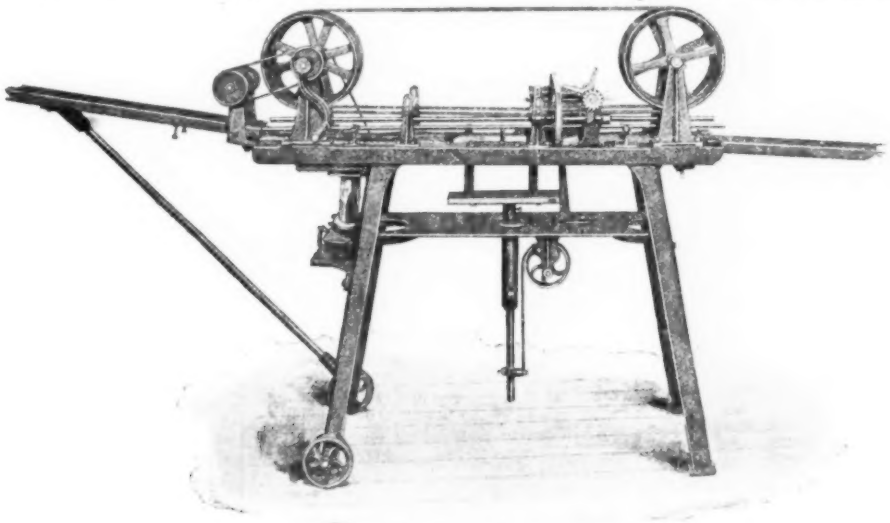
The small guide-wheels, when attached to the side-plates by means of the thumb-screw, are as rigid and strong as any part of the machine, and guaranteed in every respect. These wheels are removable.

transforming a perfect mower into a perfect trimmer (on one or both sides) in the space of five seconds, which is the time consumed in removing the plates. When the trimmer is used on one side only the



THE "PASTIME" LAWN MOWER AND TRIMMER.

mower is evenly balanced on the three wheels, remaining the same as a three-legged stool, but if both wheels are removed the front of the mower is guided by the operator by means of the handle.



LABELLING MACHINE.

It will be observed that the drive-wheels are inside the line of the side-plate and never go over the unmown grass, but, unlike the old-style mower, while one guide-wheel does go over the unmown grass, the weight is so slight on the front of the machine that it does not mat down the grass so but that it is mown evenly on the return cut.

One of its principal features is the fact that the knives can be kept in perfect order by the user by the use of a file, without any liability of damaging the machine. In fact, it can only be sharpened with a file, and can be done in the hands of a novice.

This machine is manufactured by the Pastime Lawn Mower Co., of Detroit, Mich., which will quote prices on application.

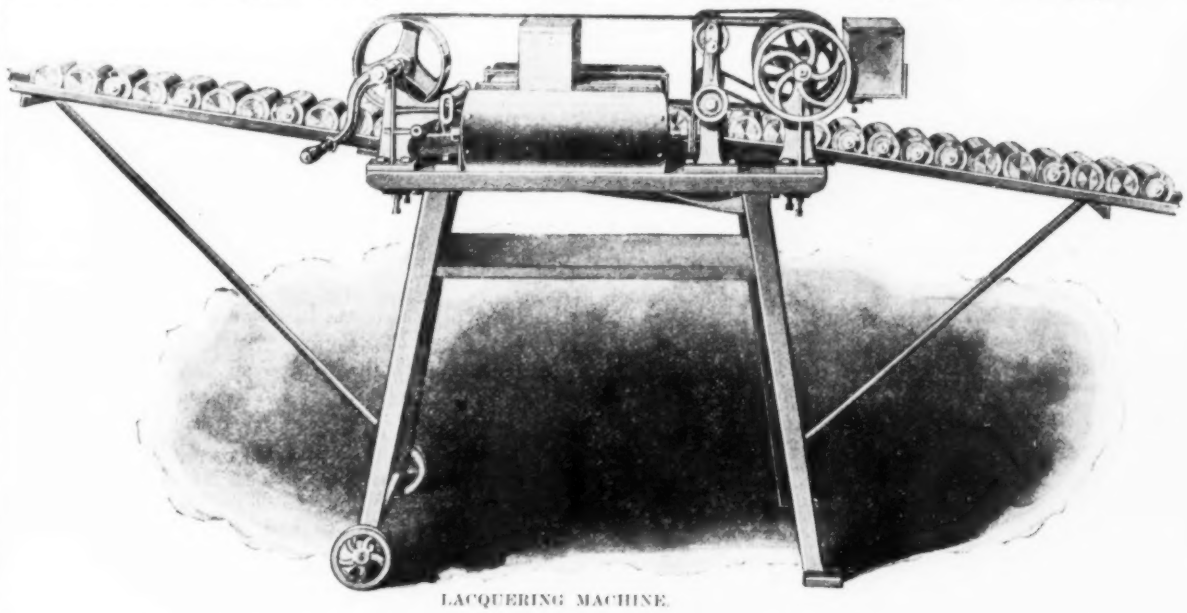
Labelling and Lacquering Machines.

The labelling and lacquering machines of which illustrations are herewith presented are the result of years of experience and study on the part of their inventor, Mr. C. A. Burt.

Having at various times been connected with large packing and canning plants in this country, both of his own and others, Mr. Burt realized some years ago the necessity of machinery such as he perfected and has placed on the market.

The machines are built by the Burt Labelling Machine Co., of Baltimore, Md., offices in the Equitable Building, and any further particulars desired, with complete technical description of the manufacture and operation of the machines, is furnished on application.

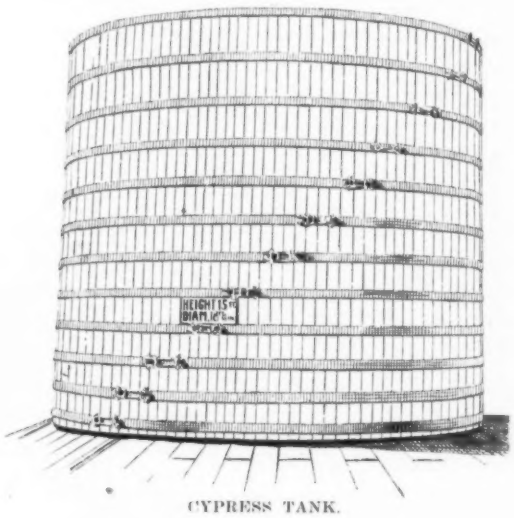
In addition to the most complete arrangements for producing these machines, the Burt Labelling Machine Co. has equipped a separate shop for building special machines; that is, machines made to order to put labels on circular packages of any size, and to repair and remodel old machines.



LACQUERING MACHINE.

Cypress Tanks.

The Cypress Lumber Co., Apalachicola, Fla., is one of the oldest enterprises in the South that has made the manufacture of cypress lumber a specialty. Having been in operation since 1883, devoting time and attention to the best methods for manufacturing and drying cypress lumber, this company has one of the largest and best-equipped double band mills and a yard that has a capacity of from 12,000,000 to



CYPRESS TANK.

15,000,000 feet. In addition to the saw mill, the company has a large planing mill, one department of which is devoted exclusively to the manufacture of cypress tanks and cisterns. An illustration of a cypress tank is presented.

Literary Notes.

Laird & Lee, of Chicago, announce the immediate publication of the "Salva-Webster Spanish-English and English-Spanish Dictionary," especially compiled from the works of the famous lexicographers Don Vincente Salva and Noah Webster. The first copies issued from the press have been presented to the commanding officers of the United States Navy. This book, of about 400 pages, contains, besides the dictionary proper, a compact geographical and biographical cyclopedia of all Spanish-speaking countries, with maps from official sources, and list of consulates.

Victor Serenus. By Henry Wood. Publishers, Lee & Shepard, Boston. Price, $1.50.

This bit of fiction dealing with the Pauline era is written in attractive style, which, however, gives evidence of hasty composition toward the conclusion. It traces the life of Saul of Tarsus from boyhood, and upon a background of philosophic Unitarianism paints sketches of spiritualism, Grecian mysteries, telepathy, psychical propulsion and magic involved in two tender love episodes. The apparent attempt, unconscious perhaps, to harmonize religious fads of the present with manifestations of the past is a bold and clever one, but it does not impress the mind with the beauty and strength of the character of the great Apostle to the Gentiles, revealed in the only record of his words and acts.

The annual report of the naval stores producers of Savannah, Ga., shows that the receipts for the year just closed were 18,000 packages of turpentine and 49,000 packages of rosin less than the preceding year. The total receipts were 313,797 casks of turpentine, of which 214,395 were shipped to foreign ports and the balance to American markets. Of rosin, 863,717 barrels were exported, and the balance sent to the American consumers.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in any town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and even then they must expect the return of some letters, because of the lack of knowledge on the part of postmasters of all new companies. Criticisms and complaints are invited, as they will the better enable us to guard against errors.

ALABAMA.

Birmingham—Gas Plant.—The Birmingham Gas Co. will expend about $25,000 in improvements to its plant.

Centreville—Woodworking Factory.—Edmonds, Latham & McKinley will establish a factory for the manufacture of sash, doors, blinds, etc.*

Decatur—Saw Mill.—Arentz Bros. will rebuild their $50,000 saw mill, which was destroyed b[illegible] recently.

Demopolis.—Woodworking Factory.—Spraggins & Neff, of Jackson, Tenn., have purchased 2000 acres of timber land near Demopolis, and will erect woodworking factory, etc.

Montgomery—Water Works.—The city will doubtless make improvements to the recently-acquired plant of the Capital City Water Co.; probably several miles of mains will be laid in the near future, and new pumps placed in position; John H. Clisby, mayor.

Troy—Machine Works.—Joseph Minchener & Son will establish machine works; machinery all purchased.

Tuscaloosa—Cotton Mill.—D. J. Griffin contemplates the establishment of a cotton-wadding factory.

Walker County—Coal Lands.—B. M. and H. W. Long, of Birmingham, Ala., have sold 12,000 acres of coal lands in Walker county to Northern and Southern capitalists who will develop coal mines, erect coke ovens, etc., expending $500,000 in the work. The purchasers include H. W. and H. C. Manderville and A. F. Aycock, of Carrollton, Ga.; the Ivy Coal & Coke Co., of Birmingham, and others. Address the last named.

ARKANSAS.

Higginson—Sewer System.—A sewerage system will be constructed. An engineer will be wanted to prepare the plans. For information address W. H. Hipolite, chief engineer D. A. & N. Railway.

Nashville—Mining and Milling.—Incorporated: The Schuyler Mining & Milling Co. by Thomas Parris, of Nashville, Ark.; Clarence C. Schuyler and Frank H. Irons, of Fargo, N. D. The capital stock is $150,000. Address Thos. Parris.

Pine Bluff—Electric-light Plant.—Wilber W. Harrison, of Anderson, Ind.; Nat Covington, of Peru, Ind., and others have franchise for lighting and will arrange at once for the establishment of plant for electric lighting and for furnishing power to street railway; will probably have 4000 incandescent lamps, sixty commercial arcs. Address Wilber W. Harrison, Room 5, Hurst Block, Anderson, Ind.*

FLORIDA.

Key West—Coal Piers, Plants, etc.—The national government has contracted for two coalhouses, each 150x100 feet, to be built at Key West; buildings will be steel framework, and rest on wooden piling; will also build a steel pier 304 feet long and forty-eight feet wide, with a wooden approach 468 feet long and sixteen feet wide. The stations will each have four conveyors, for which a contract has been let at $151,000; conveyors will be operated by steam power; reaches will be fifty-five feet above the piers and about forty feet in length.

Live Oak—Iron Foundry.—George Robins and associates intend to put in operation an iron and brass foundry.

Live Oak—Cigar Factory.—Rees & Rees have established a cigar factory.

Ocala—Tobacco Cultivation and Manufacturing.—The Florida Cuba Tobacco Co. will be incorporated by Fred C. Buffman, David S. Williams and L. J. Medero. The capital stock is placed at $50,000; objects, to purchase and improve lands for the growing and cultivating of tobacco, to cure, buy, sell and prepare tobacco for market, and manufacture tobacco and cigars. Address L. J. Medero.

Tallahassee—Bottling Plant.—The Panacea Mineral Spring Water Co. has been organized, with Dr. E. W. Granigan and Thomas H. Hall, of Boston, and T. G. Rawls and Robert Gamble, of Tallahassee, as incorporators. The company will establish a bottling plant for a mineral water.

GEORGIA.

Jefferson—Oil Mill and Ginnery.—The proposed company, recently noted, has been organized as the Jefferson Manufacturing Co., with capital stock of $18,000, and will erect a 20-ton cottonseed-oil mill and four 70-saw gins. Contract for all machinery has been awarded; H. W. Bell, president and manager.

Monticello—Cotton Mill.—L. O. Benton & Bro. are interested in the proposed cotton-mill company.

Rome—Cotton Ginnery.—The Rome Ice Manufacturing Co. will erect a ginnery of fifty bales daily capacity.

Washington—Water Works.—The city expects to construct water works at once, as has been contemplated. For information address J. R. Dyon, chairman of committee.

Washington—Steam Laundry.—R. C. Walton expects to establish a steam laundry.*

KENTUCKY.

Clay County—Stone Quarries.—J. C. Porter, John Selby, I. B. Wilford and R. M. Wilford, all of Bowling Green, Ky., have purchased lithographing-stone lands in Clay county and will probably open quarries.

LOUISIANA.

Alexandria—Sugar Factory.—The Rapides Sugar Refinery Co., Limited, noted last week as incorporated, will build a sugar factory for the crop of '99. Address F. M. Welch.

Alexandria—Bridge.—Incorporated: The Alexandria Bridge Co., Limited, capital stock $75,000, to erect a traffic bridge across Red river, between Alexandria and Pineville; F. M. Welch, president; E. J. Barrett, vice-president; G. O. Watts, secretary; F. F. Rogers, treasurer.

Amite City—Ice Factory.—A $5000 stock company will be organized to erect an ice factory. A. P. Stewart can give information.

Calcasieu Parish—Timber Lands Development.—H. Zech and J. H. Grimmer, of H. Zech & Co., Ellis Junction, Wis., are examining timber lands in Louisiana (Calcasieu parish) and may purchase 50,000 to 100,000 acres of timber land and erect mills to cut same.

Hornbeck—Saw Mill.—Mr. Kirkland, of Kirkland, Ark., will erect a 50,000-foot-capacity saw mill at Neame, near Hornbeck. Address at Kirkland.

Leesville—Saw Mills, Timber Lands, etc.—W. A. Pickering & Son, of Springfield, Mo., have purchased 22,000 acres of timber land south of Leesville at $15 per acre, and will develop same, erecting a saw mill of 125,000 feet daily capacity.

Plaquemine—Lumber Mills.—McDonald Bros., of La Grange, Ark., will establish a lumber mill at Plaquemine, to operate under the name of McDonald Bros. & Wilson.

Shreveport—Mercantile.—Incorporated: The Jordan & Booth Co., Limited, for mercantile purposes; capital stock $25,000; J. H. Jordan, president.

MARYLAND.

Baltimore—Bakery.—The Standard Baking Co. has been incorporated by Frederick Willcox, John Reiser, James W. Robinson, Thos. P. Johns and Fred C. Scott; with capital stock of $15,000.

Cumberland—Heating Company, etc.—The Chesapeake Manufacturing Co., for conducting a plumbing, heating and roofing business, has been incorporated by Adolph Jochheim, William M. Warfield, George V. Jochheim, Moses Greenberg and Robert Biggs. The capital stock is $6000.

Easton—Iron Bridge.—The counties of Caroline and Talbot will build a joint bridge of iron, three spans, pivoted draw, etc. Address "Talbot County Commissioners."

Easton—Bridge.—The counties of Talbot and Caroline will award contracts for the construction of iron and steel bridge, etc. Address Thomas R. Green, clerk Caroline county commissioners, and Charles F. Stewart, clerk Talbot county commissioners.*

Gapland—Telephone Line.—The Gapland Telephone Co. has been incorporated by John Ahalt, Hamilton W. Shafer, George C. Huffer, George S. Huffer and T. B. Biser, to build and operate telephone and telegraph lines.

Hagerstown—Water-power Development, etc.—It is said that Powell Evans, of Philadelphia, Pa., will arrange at once for the water-power developments previously referred to. It is proposed to dam the Potomac river at Weverton, install turbine wheels and develop power to be transmitted electrically to factories in the Cumberland valley, both in Maryland and Pennsylvania. It is stated that a Philadelphia syndicate, with $6,000,000 capital, is interested in the enterprise.

Hagerstown—Bicycle Works.—The Crawford Bicycle Works is erecting another addition to its plant, and it is said that the manufacture of projectiles will be introduced at the instance of the national government.

MISSISSIPPI.

Holly Springs—Water and Light Plants.—The city has awarded contract to Guild & Co., of Chattanooga, Tenn., for the construction of its proposed electric-light plant and water works, at a cost of $35,000.

Jackson.—The Capital City Oil Mill will double its capacity, expending about $40,000 on the improvements.

Vicksburg—Chair Factory.—A. D. Martin and associates, of Cincinnati, O., contemplate locating a chair factory in Vicksburg.

MISSOURI.

Carthage—Steam Laundry.—Chas. E. Wilcox has purchased the Excelsior Steam Laundry; will put in new machinery and make other improvements.

Kansas City—Brokerage.—Incorporated: The Hocker-Arnold-Woodson Brokerage Co., capital stock $50,000, by R. W. Hocker, J. H. Arnold, S. C. Woodson and Mary T. Arnold.

Novinger—Coal Company.—Incorporated: The Rombauer Coal Co., capital stock $10,000, by E. C. Schmidt, S. S. Evans, M. T. Rombauer and others.

Potosi—Flour Mill.—Bust Bros. will build a flour mill.

St. Louis—Grain Elevator.—The Consolidated Elevator Co. will build a grain elevator, capacity 2,500,000 bushels.

St. Louis—Manufacturing.—Incorporated: The J. C. Grant Manufacturing Co., capital stock $10,000, by J. C. Grant, J. B. Edwards and A. L. Abbott.

NORTH CAROLINA.

Charlotte—Woodworking Factory.—The Folding Coop Co. has been organized, with S. F. King secretary-treasurer, to engage in the manufacture of a folding crate, invented by J. N. Cornelius, of Mooresville, N. C.

Haywood County—Timber Lands.—J. B. Hart, of Clarksburg, W. Va., and associates, owners of 55,000 acres of timber lands in Haywood county, are endeavoring to arrange for certain railroad connections, which will probably lead to the development of the property referred to.

Haywood County—Timber Lands, etc.—The North Carolina Lumber Co. has purchased 57,000 acres of timber land in Haywood county for $60,000 and proposes the development of the property by the erection of saw mills, etc. Address company, care of W. J. Cocke, Asheville, N. C.

Hobgood—Saw Mill.—W. P. White will rebuild his burned saw mill.*

Mount Pleasant—Flour Mill.—W. R. Kindley will erect a roller flour mill.

Rocky Mount—Ice Factory.—Incorporated: The Southern Ice Co., for the manufacture and sale of ice, coal, wood and other fuel in Wilmington and Rocky Mount. Capital stock shall be $12,500, with privilege of increasing to $100,000. The incorporators are William E. Worth, James W. Hines and John S. Armstrong.

Scotland Neck—Saw Mill and Woodenware Factory.—A saw mill of 50,000 feet daily capacity and a butter-dish factory addition will be established near Scotland Neck. Names of interested parties will be announced later on. Or possibly S. F. Dunn may give information to correspondents.

Shelby—Cotton Mill.—A. C. and R. B. Miller are probably interested in the proposed new cotton-mill company which is now talked of.

Southern Pines—Brick Works.—The Moore County Brick Co. has been incorporated by P. A. Stebbins, of Condersport, Pa.; D. W. Thomas, of New York; P. H. Beck, of Southern Pines, and J. C. Stanly, of Newburyport, Mass., for the manufacture and sale of brick, tiles, pottery and other articles made of clay. Address P. H. Beck.

Wilmington—Phosphate Mines, Plant, etc.—The Hanover Land & Improvement Co. has been organized, with capital stock of $25,000 (according to the provisions of its charter granted in 1897), and John S. Armstrong is president; Wm. H. Chadbourne, vice-president, and James H. Chadbourne, Jr., secretary-treasurer. The company owns 827 acres of land, will mine 100 tons of phosphate daily, erect new plant 50x100 feet, two stories high, etc.

Wilson—Flour Mill.—C. F. Finch intends to build a 20-barrel roller flour mill.*

SOUTH CAROLINA.

Greer Depot—Cotton Mill.—Chartered: By E. S. Brooks, L. J. Green and H. P. Moore, the Brooks Manufacturing Co., to deal in cotton and manufacture cotton bats. The capital stock is to be $4000.

Jonesville—Cotton Ginnery.—J. J. Littlejohn & Co. will build a large ginnery.*

Jonesville—Knitting Mill.—The Jonesville Knitting Mills contemplate adding four or more automatic half-hose knitting machines.*

Rock Hill—Cotton Mill.—W. L. Roddey, A. Friedheim, A. F. Ruff, R. T. Fewell, A. E. Smith and J. R. London have incorporated the Victoria Cotton Mills, with capital stock of $75,000, to succeed the Globe Cotton Mills.

Spartanburg—Drug Company.—Incorporated: The Flaum-Crutchfield-Tolleson Co., by S. J. Flaum, A. L. Crutchfield and W. G. Tolleson, to do a general drug business. The capital stock is to be $10,000.

TENNESSEE.

Bristol—Iron Furnace.—Stephen Noble, of Anniston, Ala., and associates have leased the Home Iron Co.'s furnace and will put it in blast.

Chattanooga—Lumber Mills.—Application has been filed for the incorporation of the Hirsch Lumber Co., capital stock $20,000, which proposes the establishment of a mill for the manufacture of lumber for exportation purposes. The incorporators are Bukofzer & Co., Julius Hirsch, late of Soldau, Prussia, and E. Perry Loomis, of Chattanooga. Address the last-named at 827 Broad street.

Coopertown—Handle Factory.—J. W. Harned, of Adams, Tenn., will establish a handle factory in Coopertown.

Hillsdale—Corn Mill.—Eller & Johnson contemplate the addition of a corn mill to their flouring mills, as recently reported.*

Huntsville — Telephone Line. — Incorporated: The Carroll County Telephone Co., by L. B. Clark, A. M. Lee, Y. B. Dolton, J. C. R. McCall and J. M. Wright, capital stock $2000, to construct telephone lines from Huntsville to Buena Vista, by way of Clarksburg, Yuma and Westport; also from Huntsville to McLemoresville; also from Yuma to Wildersville.

Memphis—Car Brakes.—Incorporated: The DeSoto Power Co., for the purpose of operating the J. C. Devlin invention for applying brakes to street cars. The incorporators are J. C. Devlin, Jacob Thompson, B. M. Stratton, Thomas C. Looney and Walter Goodman. Address J. C. Devlin.

Nashville — Cannery, etc.— Bransford & Brennan, refiners, preservers and jobbers, contemplate engaging in the manufacture of vinegar and pickles, and of canning goods.

TEXAS.

Beaumont — Lumber Company.—Incorporated: The Industrial Lumber Co., capital stock $100,000, to conduct a general lumber business; incorporators, Newton R. Wilson, of Monterey, Mexico; John M. Park and Sam Park, of Beaumont. Address Sam Park.

Beaumont—Irrigation System.—Incorporated: The Pine Island Irrigating Co., capital stock $25,000, for the purpose of irrigation, navigation, milling, etc., and the construction of a canal from the La Blanc ford, on Pine Island bayou, in a southerly direction to Taylor's bayou; incorporators are S. H. Van Warmer, Catherine Stengle and Frank Cooley. Address the last named.

Canadian — Telephone Lines. — Incorporated: The Stockmen's Telephone Co., capital stock $2500, to establish a telephone line between Ochiltree, via Lipscomb, to Lockwood; incorporators, George Gerlach, D. J. Young, W. H. Block and others. Address D. J. Young.

Cleburne—Railroad Shops.—Bids will be opened April 20 for the erection of machine, car, paint, boiler, blacksmith, tin and brass shops, pattern and store houses, with purchasing agent and superintendent of machinery offices, and boiler-house with stack, to be constructed of stone, brick and iron. Plans and specifications can be seen at Cleburne, Texas., at office of city passenger agents at Dallas and Fort Worth, and at office of the undersigned, Galveston, Texas. Bids may cover any one or all of the buildings. Address bids and inquiries to C. F. W. Felt, chief engineer, G., C. & S. F. Ry., Galveston, Texas.

Corsicana—Cotton Mill.—S. W. Bogy has a proposition from New York parties for the erection of a cotton mill.

Corsicana—Oil Refinery.—It is stated that the proposed oil refinery is now a surety; plant to have daily capacity of 10,000 barrels. J. S. Culinan can probably give information.

El Paso—Cold-storage Plant.—The San Antonio Brewing Co., H. G. Kauffmann, representative, will build a cold-storage plant in El Paso.

El Paso—Bridge.—The Santa Fe Railway Co. has decided to replace its present wooden international railway bridge with a $100,000 iron structure of four spans, and accumulation of material has already begun. The new bridge will rest on masonry.

Floresville—Oil Mill, etc.—The Floresville Oil & Manufacturing Co. has filed an amendment to its charter increasing its capital stock from $35,000 to $50,000, also adding to its purposes the general repairing of machinery.

Houston—Electric-light Plant.—The Citizens' Electric Light Co. will rebuild its $150,000 plant, which has been destroyed by fire and explosion.

Stranger—Telephone Line.—Incorporated: The Blue Ridge Telephone Co., capital stock $1000, to maintain a telephone line between Stranger and Marlin; incorporators, W. S. Hunnicutt, J. C. Shaw and R. J. Garrett. Address the last named.

Sulphur Springs—Cotton Compress.—Incorporated: The Central Compress Co., capital stock $50,000, to operate compresses; incorporators, O. M. Pate, P. H. Foscue, B. T. Robertson and B. Staubach.

Terrell—Flour Mill and Elevator.—The Terrell Milling Co. (noted recently as incorporated) has had its mill in operation for some years. The company is arranging to remodel its elevator.

VIRGINIA.

Alexandria—Flour Mill.—J. W. Emmert, of Hagerstown, Md., has purchased the old "Wheat Mill" at Alexandria, and will re-equip the plant with new machinery, increasing its capacity to 100 barrels daily.

Berkley — Electric Plant.—The Berkley Electric Light & Power Co. is having plans and specifications prepared for a proposed new plant.

Lynchburg — War-munition Works. — The Glamorgan Works is making arrangements to secure every facility for the manufacture of war munitions.

Newport News — Sewerage System.—M. Honan & Sons, of Chester, Pa., have contract at $75,794.70 for the construction of the municipal sewerage system.

Norfolk—Electric Plants.—The consolidation of the City Gas Co., the Electric Co. of Virginia and other companies has been effected, and they will be conducted hereafter as the Virginia Electric Co., a corporation for which charter was granted by the last legislature. Additional apparatus to be purchased will include six 100-horse-power generators, steam plant for operating same, new poles, wires, etc. Address W. W. Chamberlaine, Norfolk, vice-president.

Petersburg — Construction Company.—Incorporated: The W. P. Chapman Co., to construct, improve and equip railroads, bridges, tunnels, depots, section-houses and other structures used by railroads. The capital stock is to be not less than $5000 nor more than $10,000; president, W. P. Chapman, of New York; treasurer, S. E. Phelps, of Chicago; secretary, E. W. Jackson, of Chicago; directors, W. P. Chapman, S. E. Phelps, E. W. Jackson, T. Mahoney and William Henry Mann. Address W. P. Chapman, railroad contractor, New York city.

Richmond—Gas Machines, etc.—Chartered: The Union Carbide Co., capital stock not less than $300,000, nor more than $3,000,000, to manufacture and sell throughout the United States calcium carbide and all gas-producing materials and gas, especially acetylene gas. For information address Cortland Potts, Morristown, N. J., president.

Richmond—Gas Plants, Machinery, etc.—Chartered: The Union Carbide Co., to manufacture, purchase, use and sell throughout the United States and elsewhere calcium carbide and all gas-producing materials and gas, especially acetylene gas, and all machinery, apparatus and fixtures for any purpose relating in any manner to the production and use of calcium carbide and acetylene or other gas. The incorporators are Cortland Botts, of Morristown, N. J.; James Alston Cabell, A. E. Chalmers and S. J. Doswell, of Richmond, Va., and Arthur Starke, of New York city. The capital stock is not to be less than $300,000 nor more than $6,000,000. Cortland Botts, of Morristown, N. J., is president; Frederick N. Watriss, of New York, vice-president; Arthur Starke, of New York, secretary and treasurer. Address the president.

Smithville—Water System.—B. P. Eggleston will install a residence water system.*

Toano—Bottling Plant.—Wilbur H. Davis, of Boston, Mass., has organized the Taskinas Spring Co to bottle the water from Taskinas spring; capital stock is $5000.

West Point—Pickle Plant.—The Ammons Pickling Co., of Richmond, Va., will establish a pickle-preparing plant in West Point.

WEST VIRGINIA.

Charleston—Electrical Machinery, etc.—Incorporated: The Campbell Electric Traction Co., with an authorized capital of $100,000, to manufacture and sell electrical and mechanical supplies for railway companies. The incorporators are A. C. Gunther, D. M. Black, Richard Fisher, E. A. Botkin and C. W. Smith.

Charleston — Engine Company.—Incorporated: The International Engine Co., with an authorized capital of $200,000, by Henry Shayless, C. P. Ruckdeschel, F. W. Boyle, G. E. Coolridge and W. J. Wilson, all of Philadelphia, Pa. Address W. J. Wilson.

Charleston — Manufacturing. — Incorporated: The Jobson Manufacturing Co., capital $1000, by J. C. Matheny, J. Q. Barker, William Bragger, J. W. Malcolm and W. C. Barker, of Charleston.

Mannington — Glass Factory.—Chartered: The Mannington Co-operative Window Glass Co., capital stock $8000, to establish the glass factory recently mentioned. The incorporators are Edwin P. Jones, Simon J. Iwicki, Paul Iwicki, Thomas S. Jones, Jr., and Samuel P. Jones.

Morgantown — Plumbing, etc. — Incorporated: The Monongahela Plumbing & Roofing Co., with an authorized capital of $10,000, by Julius Coty, Jas. Seeley, O. O. Campbell, Fred Huhn and O. Walter Bowie. Address O. Walter Bowie.

Piedmont—Electric-light Plant.—The city has awarded a contract for street lighting to J. C. Fredlock, who says he will erect a plant at once, contract for the machinery having been placed.

Raleigh—Coal Mining.—Charters granted: To the Shady Springs Coal Co., the White Slick Coal Co., the Crab Orchard Coal Co., the Piney Coal Co. and the Beaver Coal Co., all with principal office at Raleigh C. H. The authorized capital of each is $300,000. The incorporators of each are Alfred M. Gray and William J. McHugh, of Philadelphia, Pa.; Azel Ford, of Hinton, and F. R. Van Antwerp and John Anderson, of Raleigh C. H. Address the last named.

Weston—Street Paving.—The city is about to award contracts for the paving of certain streets, to cost about $3000; F. G. Orr and others, committee.*

Womelsdorf—Chair Factory.—W. C. Stiles, of Warren, Ohio, contemplates the establishment of a chair factory in Womelsdorf or vicinity.

BURNED.

Atlanta, Ga.—O. A. Smith Guano Works; loss $100,000.

Darien, Ga.—Hilton-Dodge Lumber Co.'s mills; loss $200,000.

Frederick, Md.—Paul Houser's bottling plant

Houston, Texas.—The Citizens' Electric Light Co.'s plant; damaged to the extent of $150,000 by explosion and fire.

Joplin, Mo.—The Harman Foundry; loss $10,000.

Keno, Texas.—Saw mill of J. M. Cruse.

Suffolk, Va.—H. W. Bradshaw's box factory and planing mill; loss $10,000.

Sycamore, Tenn.—Sycamore Powder Co.'s plant damaged by an explosion.

BUILDING NOTES.

Anderson, S. C.—Warehouse.—J. J. Fretwell and others contemplate building a cotton warehouse.

Anderson, S. C.—Warehouse.—J. L. McGee and associates will build a warehouse, as has been reported; structure is to cost $15,000.

Atlanta, Ga.—Courthouse.—It is probable that Fulton county will not expend the available fund of $100,000 to erect the proposed new courthouse, but instead will improve and remodel the old courthouse; Forrest Adair and Walter R. Brown, commissioners.

Augusta, Ga.—Warehouse.—G. Lesser will erect brick warehouse 180x150 feet. There will be five compartments, with a capacity of 1000 bales each; iron front; will contain fine offices, etc.; Macmurphy & Story, architects; contract not let.

Baltimore, Md.—Dwellings, etc.—Peter Grogan will erect twenty two-story brick buildings.

Baltimore, Md.—Church.—A. H. Bieler has prepared plans for a $10,000 church building for Macedonian Baptist congregation (colored); E. M. Noel has contract for erection.

Baltimore, Md.—Dwellings.—W. H. Witz will erect nine two-story dwellings; Robert Culver two two-story frame dwellings; Loyola College several large additions, T. C. Kennedy, architect; B. B. Owens is preparing plans for three-story 40x80-foot addition to Maryland Homeopathic Hospital; Peter Grogan twenty dwellings, each two stories high, faced with buff brick and cost $1850 each.

Barium Springs, N. C.—Dormitory.—A dormitory building will be erected. Plans and specifications are being prepared. For information address Rev. Mr. McClelland, Statesville, N. C.

Birmingham, Ala. — Residences. — Julian Bingham will erect a row of flats buildings to cost $15,000.

Buena Vista, Va.—Institute.—An $8000 building will be erected for the State Deaf, Dumb and Blind Institute; address superintendent.

Charlestown, W. Va. — Residence.—Mrs. Ambler will erect a residence.

Chattanooga, Tenn.—Dwellings.—Herron Bedstead Factory has permit for $4000 dwelling; S. A. Le Clercq has permit for $2000 dwelling, and A. Mitchell for $2000 dwelling.

Georgetown, Texas — University. — Plans and specifications for the building for the Southwestern University have been accepted. Bids for the contract are now being considered. The building is to be a handsome three-story structure of stone, of modern style and architecture, and will cost complete $50,000 or $60,000. Address superintendent Southwestern University.

Govanstown, Md. — Hall. — The Golden Eagle Hall Co. has been formed by Dr. Frank M. Duncan and others, with capital stock of $8000, and proposes to erect a public hall.

Hagerstown, Md.—Hotel.—Lewis H. Gorty will erect a three-story hotel.

Hinton, W. Va.—Courthouse.—Frank P. Milburn, of Charlotte, N. C., is preparing plans and specifications to remodel county courthouse at Hinton. Contract will be let about April 25. Address James H. Miller.

Huntsville, Ala.—Warehouse.—Boyd Bros. have contracted for the erection of a warehouse.

Jackson, Miss.—Hall.—The Auditorium Association, Albert Eyrich, secretary, will build a hall costing from $20,000 to $25,000.

Louisville, Ky.—Dwellings.—John A. McDowell will build two dwellings, to cost $5000 each; Mary Purcell Henderson will build a $5000 dwelling.

Lynchburg, Va.—School.—J. M. B. Lewis will prepare plans and specifications for a schoolhouse for Mr. Walker, of Woodbury Forest.

Mannington, W. Va.—Church.—Franzheim, Glesey & Faris, of Wheeling, have completed plans and specifications for the Methodist church building to be erected in Mannington.

Monticello, Ky.—Business Block.—J. C. Huffaker will erect a business block, after plans prepared by Frank C. Milburn, of Charlotte, N. C.; cost to be $8000.

Monticello, Ky.—Courthouse.—The Fiscal Court of Wayne county adopted plans and specifications for a new courthouse as submitted by Frank P. Milburn, of Charlotte, N. C.; building to cost $15,000.

Monticello, Ky.—Residence.—H. H. Henniger will build residence after plans by Frank P. Milburn, of Charlotte, N. C.

Mount Pleasant, Tenn.—Church.—Cumberland Presbyterian congregation will erect a church building.

Newport News, Va.—School.—Bids will be opened April 14 for the erection of an 18-room schoolhouse for the city after plans and specifications by P. Thornton Marye and to be seen at his office in the Braxton Building. Address W. E. Barrett, clerk school trustees.

Norfolk, Va.—Residence, etc.—W. H. H. Trice will build a department-store building 44x75 feet, three stories high, equipped with passenger and freight elevators, etc.; also a brick and stone residence and a $6000 residence.

Pilot Point, Texas—Warehouse.—E. B. Krone will build a warehouse.

Shelby, N. C.—A. C. Miller and others have corporated the Shelby Tabernacle Co., capital stock $15,000, to build a tabernacle.

Terrell, Texas—Brick Buildings.—C. J. Newton and W. H. Echols have let contract to John Terrell, of San Antonio, Texas, for erection of two two-story brick buildings 25x80 feet each.

Sistersville, W. Va.—Residence.—S. W. Lawrence will erect a dwelling.

Suffolk, Va.—Bank Building.—The Farmers' Bank of Nansemond County will erect a new building, previously noted; work to commence soon.

Washington, D. C.—Dwellings.—Speiden & Speiden have prepared plans for two houses for L. J. Bryant; Glen Brown has completed plans for residence for Preston A. Ames; W. T. Weaver will build two-story house; Horace A. Dodge will build a two-story house; John H. Nolan will erect eight houses; James E. Barnes will erect a four-story business building; Alice Carr will erect three-story house; contracts have been closed for erection of residences for A. Costello, George Kendrick, M. C. Porter, W. Bonini, William Smith and Edward Blaine.

Yazoo City, Miss.—Opera-house.—Plans are being prepared for $22,000 opera-house to be built by a company now forming.

RAILROAD CONSTRUCTION.

Railways.

Aberdeen, N. C.—It is reported that surveys are nearly completed for the extension of the Aberdeen & Asheboro Railroad from Troy to Mt. Gilead, N. C., and that work will begin on the extension about May 1; it will be fourteen miles long. J. R. Page, at Aberdeen, is superintendent of the company.

Anson, Texas.—The business men of the town will endeavor to raise a fund of $30,-

000 to induce the construction of the Denton, Decatur & Western Railroad through Anson. This line is now being built between Sweetwater and Bridgeport. R. E. Carswell, at Decatur, Texas, is president.

Baltimore, Md.—Messrs. J. G. White & Co. have been awarded the contract for the overhead work for the Columbia & Maryland Electric Railway within the city limits. It is to be operated from the corner of Howard and Saratoga streets to Payson street, in the suburbs, and later will be completed to Ellicott City.

Baltimore, Md.—Isaac L. Straus, Harrison Cassard and Henry I. Lobe are interested in the Maryland Electric Railway Co., which has been chartered to construct a railway in Baltimore city, Baltimore county and Harford county. The route is from a point on the Philadelphia road, in the eastern suburbs of the city, to Bel Air, Md.

Batesburg, S. C.—It is reported that the Greenwood, Anderson & Western Railroad is now being extended to Batesburg, as originally proposed, and rails are now being received. George A. Wagener, of Charleston, S. C., is among those interested.

Beaumont, Texas.—The Beaumont Terminal Railway Co. has secured a franchise to construct its railway in the suburbs. L. P. Featherstone, of Galveston, Texas, is one of the promoters of the enterprise.

Bentonville, Ark.—J. M. Bayless, of Cassville, Mo., who has purchased the Bentonville Railroad, informs the Manufacturers' Record that it will be extended to Gravett, Ark., a distance of seventeen miles. Sixty-pound rails will be used.

Cumberland, Md.—It is reported that another company is being organized to build an electric railroad from Cumberland to Petersburg, W. Va. The distance is about forty miles. The route is along what is known as Patterson creek valley.

Cumberland, Md.—The directors of the Cumberland, Frostburg & Westernport Railway Co. have elected J. W. Burchinal, of Moundsville, W. Va., president, and Max Wineland, of Frostburg, treasurer. Franchises for a portion of the right of way have been secured.

Dixon, Ky.—The business men of Dixon are promoting a line to be built from a connection with the Illinois Central to this town of about eighteen miles. A proposition has been made to the railroad company for consideration. J. T. Harahan, at Chicago, is vice-president.

Elba, Ala.—B. Dunham, general superintendent of the Plant Railway & Steamship Co., informs the Manufacturers' Record that the Southwestern Alabama Railroad is nearly completed between Elba and Newton, Ala., a distance of thirty-six miles.

Elkins, W. Va.—The West Virginia Central & Pittsburg Railroad Co., it is stated, may build a branch from Elkins to Huttonsville, W. Va. C. L. Bretz, of Cumberland, Md., is general manager.

El Paso, Texas.—It is reported that the El Paso & Northeastern Railroad will be completed to the White Oaks coalfields by October 1. The distance is about 160 miles. The New Mexico Coal & Railway Co. is promoting the enterprise. C. D. Simpson, Scranton, Pa., is president.

Galveston, Texas.—The Gulf, Colorado & Santa Fe Railroad Co. has determined to enlarge its yards at Galveston and will construct about four miles of additional track. C. F. Ressegule is superintendent.

Hickory, N. C.—C. H. Dwight, engineer of the Carolina & Northwestern Railroad Co., advises the Manufacturers' Record that four miles of the extension between Hickory and Newton, N. C., have been graded by the contractor, Joseph M. Wolf. The extension is to be about ten miles long.

Jonesboro, Ark.—It is stated that the Jonesboro, Lake City & Eastern Railroad Co. will probably extend its line to Luxoria, Ark., on the Mississippi river. The road is now in operation from Nettleton to Lake City, a distance of twelve miles. A. J. Kerfoot, at Jonesboro, is general manager.

Leeds, Ala.—Work has begun upon the extension of the Southern Railway from Leeds to the property of the Sloss Iron & Steel Co. The branch will be about eight miles long. Frank S. Gannon, at Washington, is general manager of the railway company.

Ludlow, Ky.—E. O. Young, engineer of the Crescent Springs & Erlanger Railway Co., informs the Manufacturers' Record that this road will be about seven miles in length and that another route has been surveyed for it. It is calculated that the cost of the road, including the power-house, will be about $200,000. Monte Green is president of the company, and J. J. Graf, secretary.

Marietta, Ga.—The Atlanta, Knoxville & Northern Railroad Co. has begun the work of relaying twenty miles of its line with heavier rails. Jos. McWilliams, at Marietta, is general manager.

Rich Hill, Mo.—The stockholders of the Kansas City, El Dorado & Southern Railway Co. have ratified the decision to issue bonds to the amount of $450,000 to build and equip this railroad from El Dorado to Rich Hill, a distance of forty miles. Its construction is now in progress. O. H. Pitcher, at Rich Hill, is president.

Rosenberg, Texas.—The Rosenberg, Damon Mound & Gulf Railway Co. expects to begin work immediately on its line between Rosenberg and Damon Mound and to complete it by July 1 of this year. The distance is twenty miles. The company has elected the following officers: President, S. C. Brasher, of Houston; first vice-president, R. T. Mulcahy, of Rosenberg; secretary, George B. Lang, of Rosenberg; treasurer, W. N. Worthington, of Rosenberg; attorney, Noah Allen, of Galveston; chief engineer, W. R. Stockwell, of Alvin.

Sherman, Texas.—The Planters' Terminal Railroad Co. has been formed to build a railroad between Sherman and Van Alstyne, a distance of sixteen miles. Among the incorporators are W. H. Bean, of Howe, Texas; W. A. Hay, of Sherman, and C. E. Carter, of Van Alstyne. The capital of the company is $250,000.

Shreveport, La.—Clarence Ellerbe, president of the Louisiana Construction Co., which has the contract for building the Red River Valley Railroad, informs the Manufacturers' Record that the first thirty miles of this line between Shreveport and Loggy Bayou have been completed and are now in operation. The company will probably let contracts for about twenty miles of the grading on May 1, and is in the market for rails.*

Springfield, Mo.—It is reported that John O'Day and others have formed a company to build a railroad from Springfield to Jefferson City, Mo., a distance of 125 miles. It is understood that the company will ask that Dallas county issue $250,000 in 4 per cent. bonds in aid of the project.

St. Martinsville, La.—Messrs. Downey Bros., of Houston, Texas, have secured the contract for building twenty-five miles of the extension of the Southern Pacific in Louisiana and have completed the grading work. Tracklaying is now in progress. It is expected to have this line in operation by May 15.

Sweetwater, Texas.—It is reported that the Colorado Valley Railroad Co. has let a contract to Robert S. Doubleday, of San Antonio, to construct its proposed line between Sweetwater and San Angelo, fifty-two miles. Irvin Wheatcroft, at Sweetwater, is general manager of the company.

Trappe, Md.—Percival Mullikin informs the Manufacturers' Record that Talbot county may vote on the question of issuing $15,000 in bonds to aid a railroad project. It is proposed to build from a point on the Delaware division of the Pennsylvania Railroad to Trappe, a distance of four miles, and later to extend the road to Cambridge Ferry.

Waynesville, N. C.—A correspondent of the Manufacturers' Record states that the proposed railroad line in Haywood county will be fifteen miles long, and will connect with the Southern Railway at Waynesville. It is intended to reach a tract of 55,000 acres of timber land owned by J. B. Hart, of Clarksburg, W. Va., and others.

Street Railways.

Chattanooga, Tenn.—Work has begun upon an extension of the electric railroad to Rossville, in the suburbs. The line is being promoted by S. W. Divine and others.

Cumberland, Md.—Peter J. Seaver and Ferdinand Williams are interested in a railroad company being formed to build an electric line in the southern part of the city.

Pine Bluff, Ark.—Wilber W. Harrison, of Anderson, Ind., one of the promoters of the electric railway in Pine Bluff, advises the Manufacturers' Record that the road will be about eight miles in length. It is expected to let contracts as soon as arrangements can be made.

Fire Apparatus.—In recent years the production of modern fire-protection apparatus has elicited the attention of some of the most shrewd inventors of the country, and in the catalogue of Messrs. Rumsey & Co., Limited, of Seneca Falls, N. Y., is found representations of some modern fire engines and other apparatus. Over 4000 cities and villages in all parts of the world have Rumsey's fire apparatus in actual service. Catalogue may be obtained gratis.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Implements.—Maj. J. Shaw Jones, West Monroe, La., wants circulars and information regarding latest improved reaper and binders for harvesting oats.

Air Compressor.—Vicksburg Ice Co., Vicksburg, Miss., wants an air compressor 10x12x14 inches.

Boiler.—Blackwell & Delamar, Oriental, N. C., are in the market for a 50-horse-power boiler and a governor for Mansfield engine.

Boiler and Engine.—McWhirter Ginning Co., Jonesville, S. C., wants a 50-horse-power boiler and 40-horse-power engine.

Boiler and Engine.—J. R. Bell, Mount Olive, N. C., wants to buy a boiler and engine and saw mill.

Boiler and Engine.—White-Hall Co., Dillwyn, Va., is in the market for a second-hand engine, twenty-five horse-power, automatic preferred, but plain slide-valve might answer if in proper condition; also wants 35 to 40-horse-power economic boiler (such as made by Erie City Iron Works) or same size boiler in return tubular.

Boiler and Engine.—W. P. White, Hobgood, N. C., wants 20 or 25-horse-power boiler and engine.

Boilers and Engines.—Sydnor Pump & Well Co., Richmond, Va., is in the market for small vertical steam engines and boilers ranging from two to ten horse-power.

Chair Stock.—Rishell & Son, Alexandria, Va., want to correspond with manufacturers of chair stock.

Boilers and Engines.—See "Mining Machinery."

Brick Machine.—Greer Machinery Co., Knoxville, Tenn., is in the market for a second-hand No. 8 brick machine (Brewer preferred).

Bridge.—Bids will be opened May 12 for the construction of steel and iron bridge for the counties of Caroline and Talbot in Maryland. Address for particulars Thomas R. Green, clerk Caroline county commissioners, or Charles F. Stewart, clerk Talbot county commissioners.

Bridges.—Two bridges, iron or steel, will be constructed near Elberton, Ga. Address W. O. Jones for information.

Canning Machinery.—H. C. Chapman, Florence, S. C., wants prices on canning machinery.

Corn Mill.—Eller & Johnson, Hillsdale, Tenn., will probably buy a corn mill of ten bushels daily capacity.

Cotton Gin.—J. J. Littlejohn & Co., Jonesville, S. C., wants to correspond with builders of cotton gins, cottonseed crushers, hullers, etc.

Crushing Machinery.—Sydnor Pump & Well Co., Richmond, Va., is in the market for stone crushers.

Ditching Machinery.—R. L. Martin, Weir Park, Fla., wants addresses of manufacturers of ditching and dredging machinery for canal constructing purposes.

Electrical Elevators.—Office of the Public Printer, Washington, D. C.—Sealed proposals will be received until April 14 for furnishing and erecting in the Government Printing Office seven electric elevators. Detailed specifications and regulations with which bidders must comply may be obtained by addressing this office; F. W. Palmer, public printer.

Electric-light Plant.—Stuttgart Water & Electric Light Co., care of Charles Williamson, Stuttgart, Ark., will want this summer high-speed engine, dynamos for arc and incandescent lighting, etc., for electric-light plant. (See "Water Works.")

Electric-light Plant.—H. C. Chapman, Florence, S. C., wants prices on gas pipe, chandeliers, fixtures, electric attachments and plant for lighting.

Electric Plant.—Wilber W. Harrison, Room 5, Hurst Block, Anderson, Ind., will probably let contract within sixty days for electric-light and power plant; to furnish 4000 incandescent lamps, sixty commercial arcs; shall need power to furnish 250 arc lights and to operate ten or twelve motors.

Engine.—R. J. H., care of Manufacturers' Record, will want a good second-hand 50 to 80-horse-power engine (Corliss).

Engine Governor.—Blackwell & Delamar, Oriental, N. C., are in the market for a governor for a Mansfield engine.

Excavating Machinery.—See "Ditching Machinery."

Fertilizer Machinery.—N. G. W. Walker, Barnwell, S. C., wants to correspond with manufacturers of fertilizer-mixer machinery.

Flour Mill.—C. F. Finch, Wilson, N. C., wants bids on a 20-barrel roller-process flour mill.

Furniture Attachments.—Conway & Walker, Danville, Va., want to correspond with makers of reversible iron turners for school benches.

Furniture Machinery.—J. F. Slater, Birmingham, Ala., wants full details and lowest prices upon furniture-manufacturing outfit that has been used, but practically as good as new.

Gas Plants.—H. C. Chapman, Florence, S. C., wants to correspond with makers of calcium carbides, acetylene gas generators, etc.

Heating Apparatus.—A. L. Baylor, Springfield, O., is in the market for complete heating plant for a 10-room modern residence, either warm-air or hot-water system.

Hoisting Equipment.—See "Mining Machinery."

Knitting Machinery.—A. J. Henderson, Hampton, Ga., has not yet placed order for sewing or trimming machines for knitting mill.

Knitting Machinery.—Jonesville Knitting Mills, Jonesville, S. C., wants prices on four or more half-hose automatic knitting machines.

Laundry Machinery.—R. C. Walton, Washington, Ga., wants estimates on steam-laundry equipment.

Lumber-mill Equipment.—Fred J. Browne, Plant City, Fla., wants to buy a stump-puller.

Machine Tools.—Wm. P. Garnett, 20 East-cheap, London, England, wants addresses of manufacturers of reeling machines, suitable for straightening and polishing bars when they are being rolled, for bars eight to sixty millimeter diameter. Full particulars regarding such machines wanted in first letter.

Mail-equipment Supplies.—The Postoffice Department, James A. Gary, Postmaster-General, Washington, D. C., will open proposals May 5 for supplying for the use of the mail-equipment shops wire, rivets, burrs, emery, steel, chemicals, etc. Write for specifications, etc.

Mining Machinery.—Eagle Pass Coal & Coke Co., Louis F. Dolch, Eagle Pass, Texas, will be in need of all kinds of coal-mining machinery, tools, cars, hoisting engines, boilers, pumps, pipes, etc.

Mixing Machinery.—See "Fertilizer Machinery."

Monumental Stone.—James L. Davis, Winnsboro, S. C., wants to correspond with quarriers of monumental stone, especially granite.

Oil Mill.—Wayne J. Stump, Womelsdorf, W. Va., wants to buy a sassafras-oil mill.

Paving.—The city of Weston, W. Va., will award contracts May 1 for certain street paving, to cost not more than $3000; material to be either shale brick (unglazed), shale brick (glazed) or buff brick (bastard fire clay), commonly designated as paving brick; sample must accompany each bid; contractor to furnish sand, etc. For further particulars address F. G. Orr and others, committee.

Paving Improvements.—The city of Macon, Ga., will award contracts April 12 for certain street-paving improvements. For particulars address Bridges Smith, city clerk.

Piping.—See "Mining Machinery."

Plumbing.—Proposals will be opened April 25 for installation of the plumbing in the new courthouse at Baltimore. Drawings and specifications may be seen at office of inspector of buildings, City Hall; at office of Architects Wyatt & Nolting, 4 East Lexington street; at rooms of Builders' Exchange, or copies will be furnished on receipt of $25, of which $20 will be returned if plans are returned in good order. Address Henry D. Harlan and Robert H. Smith, sub-committee.

Postal Service.—Proposals will be opened May 5 for supplying Postoffice Department and postal service with rubber stamps, twine, facing slips, cancelling ink, mucilage, glass goods, rulers, erasers, etc. Send for full particulars and blank for proposals.

Address James A. Gary, Postmaster-General, Washington, D. C.

Postoffice-department Supplies.—Proposals will be opened May 5 for supplying Postoffice Department with coal, wood, chairs, ice, carpet, cotton cloth, etc. Send for blank forms of proposals and full particulars. Address James A. Gary, Postmaster-General, Washington, D. C.

Pumps.—Sydnor Pump & Well Co., Richmond, Va., is in the market for hand-bilge pumps, made of tin and galvanized iron.

Railway Equipment.—Louisiana Central Construction Co., Clarence Ellerbe, president, Shreveport, La., is in the market for 300 tons of relaying rails, fifty or fifty-six pounds.

Railway Equipment.—See "Mining Machinery."

Road Machinery.—See "Crushing Machinery."

Roofing and Siding.—McWhirter Ginning Co., Jonesville, S. C., wants corrugated steel siding and roofing.

Saw Mill.—McWhirter Ginning Co., Jonesville, S. C., wants saw-mill outfit.

Saw Mill.—J. R. Bell, Mount Olive, N. C., wants to buy a boiler and engine and saw mill.

Saw Mill.—Callahan Manufacturing Co., Limited, Washington, La., wants a band saw mill complete; new or second-hand.

Saw Mill.—W. P. White, Hobgood, N. C., wants to buy complete saw-mill outfit, including 20 or 25-horse-power boiler and engine.

Smoke Consumer.—A. J. Merrill, P. O. Box 221, Atlanta, Ga., wants full particulars regarding smoke consumers.

Steam Tenders and Pile Sinkers.—Mississippi River Commission, 2732 Pine street, St. Louis, Mo.—Sealed proposals in triplicate for furnishing three small steam tenders and four pile sinkers will be received until April 14; information furnished on application; H. E. Waterman, captain engineers, secretary.

Telephone Equipment.—W. H. Barber and associates, Moultrie, Ga., may possibly need to buy more telephone equipment.

Tobacco Machinery.—Florida Sumatra Co., Quincy, Fla., wants to buy two tobacco presses (double Sampson jack presses).

"Wagon Factory," P. O. Box 674, Birmingham, Ala., wants lowest prices upon good, complete outfit for turning out twenty-five to forty farm or heavy wagons per day; machinery must be in first-class condition, up-to-date in character and cheap for cash. Would also consider complete, up-to-date outfit for carriage and buggy factory.

Water Works.—Stuttgart Water & Electric Light Co., care of Charles Williamson, Stuttgart, Ark., will want equipment for water works, including boiler, vertical compound pump, six-inch cast-iron water pipe, hydrants, valves, etc. (See "Electric-light Plant.")

Water-works Supplies.—Crowley, La., wants lowest prices on pipes, cocks, Ls, Ts, delivery boxes, nipples, unions, hose, hose carriages, etc. Address J. E. Barry, mayor.

Water Works.—B. P. Eggleston, Smithville, Va., will buy pipe, tank, tubs, closets, hot-water fixtures, etc., for residence water system.

Wire.—D. W. Brown, Wellborn, Fla., wants a lot of web and barbed wire.

Wire-fence Machines.—Edw. E. Gordon, Elba, La., wants fence-making machines.

Woodworking Machinery.—See "Wagon Factory."

Woodworking Machinery.—C. F. Finch, Wilson, N. C., wants a panel dresser, working to twenty inches wide; also matcher, working from twelve down to two inches.

Woodworking Machinery.—W. P. Carson, North Wilkesboro, N. C., wants to buy machinery for making two-and-a-half-inch insulator pins (thimble or skeleton pins); also wants addresses of insulator pin machine builders.

Woodworking Machinery.—S. A. Porter, Fordsville, Ky., wants a small surface planer, to plane timber 6x12 inches, and for general surface planing.

Woodworking Machinery.—Edmonds, Latham & McKinley, Centreville, Ala., want planer, matcher and molder, six-inch or eight-inch four-sided molder; mortiser, sash tenoner, 16-inch lathe, band saw, rip saw, emery stand, etc.; second-hand in good condition.

For the Yukon River.—The Westinghouse Machine Co., of Pittsburg, Pa., is furnishing twelve engines for the electric-lighting plants on the new steamers for the Yukon river, which are being built at Seattle, Wash.

TRADE NOTES.

Heating Plant.—Messrs. Warren Webster & Co., 322 Broadway, New York city, have been awarded a contract for the use of the Webster system by the Hudson Electric Light Co., Hoboken, N. J., to supply steam heat for eleven model tenement-houses 1500 feet from power station.

New Looms.—The Draper Co., of Hopedale, Mass., is very busy in its loom department, having liberal orders on hand for the Northrop loom. Mills that have thrown out old looms and put the Northrop loom in their place report a large reduction in the cost of weaving thereon.

A Good Order.—The Bonneville Cement Co., whose works were recently burned, was so pleased with the working capacities of the Griffin mills used in its old works that order was given the Bradley Pulverizer Co., of Boston, Mass., to construct five new Griffin mills for the new plant.

Ball Engines Again.—Additional orders placed for the Ball engines, built by the Ball Engine Co., of Erie, Pa., include that for a 250-horse-power tandem engine (compound), direct connected with 150-kilowatt dynamo; a 175-horse-power engine, boiler and heater, and two vertical cross-compound engines, to be direct connected to Siemens-Halske generators.

Hoisting and Conveying Plant.—The Brown Hoisting & Conveying Machine Co., of Cleveland, O., has received a contract for building two plants for unloading and storing coal at Key West and Dry Tortugas for the United States government. It is understood that the plants are to be similar to the regular type of Brown patent suspended-bridge tramway.

The Art of Weaving.—In a circular now in preparation, the Draper Co., of Hopedale, Mass., presents a statement of its connection with the art of weaving, and in a lucid and convincing manner gives most pointed reasons for the preference of the Northrop loom. Any user of cotton-mill machinery will find some notes of interest in this circular, and should send for copy.

Order for Air Brakes.—During the month of March the Westinghouse Air Brake Co., of Pittsburg, Pa., manufactured, sold and shipped from its works at Wilmerding, Pa., 16,628 sets of air brakes for freight cars. Such a record is ample proof of the efficiency and superiority of the air-braking system as made by this company, and which is used by most of the important steam railroad systems of this country.

Foundry Supplies, etc.—A plant has been established recently at Cincinnati, O., by the Hill & Griffith Manufacturing Co. for the production of foundry facings, supplies and equipments. The plant is of ample size, is well located and modernly equipped for a large line of the goods intended to be made. The floor space of the works is 250x250 feet. Messrs. Hill and Griffith, of the firm, are well known to the foundrymen of the country.

Duplex Heater.—Notice is given that the heater formerly known as the C. R. Meres, and manufactured by the C. R. Meres Heater Manufacturing Co., of Norwalk, O., has been changed to the "Duplex" water tube heater, and will hereafter be manufactured by the S. W. Owen Co. at the old stand, West Water street. Address all communications to the new firm. This heater is claimed to be positively protected against expansion and contraction.

Heintz Steam Trap Again.—"We have a story to tell you about the Heintz steam trap. The story is printed on sixteen pages of paper, in easily readible type, and if you're interested in steam traps we think the booklet will sell you a Heintz, or at least induce you to accept our proposition to install one for you on thirty days' trial. At the end of thirty days you can either buy or return it to us. May we have the order on these terms?" The foregoing is being sent out on return postal cards by the W. S. Haines Co., of 136 S. Fourth street, Philadelphia, Pa.

Buffalo Forge Abroad.—An important feature at once appreciated and commending use is that of the Buffalo down-draft forges, which removes the smoke immediately as generated at the fire without the possibility of being allowed to escape into the rooms, maintaining therefore as pure air in the forge shop as in well-ventilated machine shops. Recent orders filed by the Buffalo Forge Co., of Buffalo, N. Y., for shipment abroad include one calling for eighteen forges, an 80-pound steel-plate exhaust fan for removing smoke and No. 8 blower for furnishing blast.

Large Government Contract.—The Brown Hoisting & Conveying Machine Co., of Cleveland, O., through its New York office, has closed a contract with the United States government for four separate coal-handling plants for the Navy Department, for coaling battleships, two of these plants to be located at Key West and two at Dry Tortugas, each plant consisting of two of Brown's patent bridge tramways, with self-filling buckets of two tons capacity each, making eight bridges in all. The contract price was $151,000, and was evidently awarded to the Brown Company on merit, as its bid was $60,000 higher than the lowest bidder.

Electrical Machinery.—Contracts have been awarded for the erection of a new foundry at the works of the General Electric Co., at Schenectady, N. Y. The large and rapidly increasing demand for the electrical apparatus of the company has made this additional department necessary. The new shop will be equipped with every device and machine deemed advisable by the management, and the facilities of the company for producing its large line of electrical devices will be greatly increased. The demand for generators of large size has of late been increasing, until now those of 4000 horse-power are not regarded as large, and several of 5000 horse-power are now under construction.

GOLD FIELDS OF TEXAS.

Richness of Minerals in the Llano District.

San Antonio, Texas, March 31.

Editor Manufacturers' Record:

Some interest is being aroused in the recent gold find in Gillespie and Llano counties. In an interview with Judge T. M. Paschal and Mr. George Angle, two of the incorporators of the Mount Hudson Gold Mining Co., Mr. Angle, who has had considerable experience in mining both in Mexico and in Colorado, said:

"About a year ago a prospector named Juks drifted into the northern part of Gillespie county and at the foot of Mount Hudson, after panning the dirt in the gullies, discovered a narrow ledge of quartz about an inch in width carrying colors of native gold. He obtained control of the land and sunk a shaft on his find to a depth of ten feet. His money gave out and he was obliged to associate others with him.

"The work was continued down, following the stringer of quartz carrying native gold, which gradually widened until at a depth of fifty feet it is a foot in width, instead of an inch, which gave encouragement to the owners.

"On the recent trip to this State of Professors Willis and Hill, of the United States geological survey, the rumors of numerous gold discoveries in the Llano district reached their ears, and they were persuaded to make a hurried trip through that section with the view of having the government make a geological survey of the district. Among other properties visited by these geologists was that belonging to the Mount Hudson Company. On their return, on their way through this city, they were met by some of the interested parties, and in course of conversation they made the suggestion that the vein matter outside of the narrow pay stock ought to carry values. Acting upon the suggestion of the geologists, the superintendent was instructed to take samples of the different stratifications of rock across the breast of the vein, which, in the face of the present workings, at a distance of 100 feet from the surface, has widened out to seventeen feet. These samples were brought to the city and dispatched to the firm of Decker & Boggs, assayers, of Monterey, Mexico. There are six distinct stratifications in the vein from which samples were taken as follows: Sample No. 1—Toward the hanging wall, one foot in width, yielded $2 per ton in gold. Sample No. 2—One foot wide, yielded $1 per ton in gold. Sample No. 3—Seven feet in width, yielded $8 per ton in gold. Sample No. 4—Five feet wide, yielded $6 per ton in gold. Sample No. 5—Two feet in width, yielded $188 per ton in gold. Samples Nos. 6 and 7 were both taken from the so-called pay streak, one foot in width, and which consists of a greenish quartz and schist, called by the geologists a gold schist.

"There are two classes of ore in the pay streak, one from which sample No. 6 was taken, in which no values are discoverable to the naked eye, and the other from which sample No. 7 was taken, containing particles of native gold from the size of the head of a pin to that of a grain of wheat, distributed through the rock. The assay from sample No. 6 yielded a value of $1160 to the ton, and from sample No. 7 of $15,160 to the ton. Discarding the values of sample No. 7 as being a picked sample, the entire width of seventeen feet across the breast of the vein yielded an average of $95.59 in gold to the ton.

"This pay streak runs down alongside of what has been regarded as the foot wall, being separated from it by a few inches of talc. Thinking the values might extend beyond the talc seam into the foot wall, on the occasion of my last trip to the mine I had a shot put into the wall and sent a sample from the same to Mr. H. J. Clifford, superintendent, and assayed for the Schryver mine for a test. Mr. Clifford's certificate gives a valuation of 2 7-10 ounces or $54 in gold per ton. This from the rock which has heretofore been regarded as the foot wall, opens the probability that the full width of the vein has not yet been explored. The company now have a small force of men at work at the mine which will be increased from time to time as occasion requires. The disposition to be made of the ores is a question now under consideration. We are too little acquainted with the ores and in what form their value occurs, whether in free gold or in combination with other minerals, to determine the proper mode of treatment; whether they should be reduced on the ground or shipped to the Colorado smelters. Under the present railroad rate $20 per ton would pay the cost of mining, transportation and treatment charges at the Colorado smelters, so that there is already available a profitable outlook for the ores."

Judge Paschal, a former district judge and late member of Congress from this district, confirmed these statements made by Mr. Angle, and expressed himself as fully satisfied that a bonanza has been found. This find is in the well-known Llano district, where Mr. Schryver, of this place, is working with profit a gold mine. The richness of that section in iron, manganese, fine marble, granite and other building materials is known to your readers. The tier of lofty hills (they would not be called mountains by persons who had seen the Blue Ridge or the Rocky range), extending northeast and southwest through Bennett, San Saba, Llano, Gillespie, Nassau and other counties to the Rio Grande border, abound in this same class of ores and marble and granite that so abound in Llano, and doubtless have hidden in their deep and as yet unexplored recesses vast quantities of the precious metals. The laws of this State prior to 1889 did not reserve the minerals found in patented land, consequently the minerals of all lands patented prior to that time belong to the owners of the soil. There is still, however, much of this long range of hills stretching from the Colorado to the Rio Grande still owned by the State, and

prospectors may find lands rich in minerals upon which to file their claims.

ELIAS EDMONDS.

Iron Markets.

Cincinnati, O., April 2.

The extraordinary flood which has prevailed throughout the entire Ohio Valley during the past ten days has interfered seriously with manufacturing at many of the mills and foundries and the water recedes with provoking slowness. The consequent damage and destruction have occasioned the district an immense loss in the aggregate.

The uncertainty of the maintenance of peace necessarily hinders the free full development of many new enterprises and improvements, but as to just what extent cannot be estimated.

Notwithstanding the discouragements and drawbacks, trade is not disappointing. A fair volume of business is being done, and the week closes with an increase of inquiries and rather more numerous sales.

The belief obtains that the dissipation of the war clouds with a peaceful adjustment of the Spanish questions in which our national honor shall be unimpaired will enable the country to go on to the realization of its hopes and 1898 prove yet the largest and best year of its commercial life.

The market closes in good form with the optimists in the majority.

We quote for cash f. o. b. Cincinnati:

Southern coke, No. 1 foundry	$9 75@	$10 00
Southern coke, No. 2 foundry	9 50@	9 75
Southern coke, No. 3 foundry	9 25@	9 45
Southern coke, gray forge....	8 75@	9 00
Southern coke, mottled.....	8 75@	9 00
Southern coke, No. 1 soft....	9 75@	10 00
Southern coke, No. 2 soft....	9 50@	9 75
Belfont coke, No. 1, Lake Sup.	11 00@	11 50
Belfont coke, No. 2, Lake Sup.	10 50@	10 75
Hanging Rock charcoal, No. 1.	14 50@	15 50
Tennessee charcoal, No. 1....	12 50@	13 00
Jackson Co. silvery, No. 1....	12 50@	13 00
Standard Georgia car-wheel..	14 25@	15 00

Quote cash f. o. b. Philadelphia docks:

No. 1 X standard Alabama...	——@	$11 00
No. 2 X standard Alabama...	——@	10 55
No. 1 X lake ore coke iron...	——@	11 75
No. 2 X lake ore coke iron...	——@	11 25
Lake Superior charcoal.....	——@	13 25
Standard Georgia C. C.....	——@	15 50

New York, N. Y., April 2.

War excitement has not prevented a fair volume of business in iron. The transactions of the week have been what might be called liberal. The market is not strong, but furnaces have well defined minimum limits which they will not exceed. Some lots of warrant iron in the hands of weak holders have been pressed on the market. They have gone mainly into stronger hands and considerable quantities of warrants have been released for immediate shipment of the iron. The pressure from this quarter is therefore pretty well relieved. One feature of the warrant market is that whenever stocks slump in Wall street and money rates rise, warrants are pressed for sale. As soon as the market becomes firm they disappear and the higher prices go, the fewer are offered.

The situation in Great Britain has excited considerable attention. A recent article in the London Statist made a strong presentation of facts pointing to an iron famine before the end of the year. Most English dealers do not share in this view. Stocks are diminishing still, but not as rapidly as last year, Great Britain having practically lost its Continental trade. Prices on the other side have a declining tendency. In Cleveland iron they are exactly what they were a year ago; in hematite there has been an advance of a shilling, and in Scotch something less than a shilling.

We quote for cash f. o. b. New York:

No. 1 X standard Alabama..	$10 75@	11 00
No. 2 X standard Alabama...	10 50@	10 75
No. 1 X lake ore coke iron....	12 50@	12 75
No. 2 lake ore coke iron....	12 00@	12 25
Niagara coke malleable.....	12 00@	12 25
Rome (Ga.) charcoal.....	15 00@	15 50
Hinkle L. S. charcoal.....	13 00@	13 50

ROGERS, BROWN & CO.

FINANCIAL NEWS.

SOUTHERN BUSINESS FAILURES.

Decrease of Nearly $5,000,000 in Liabilities Compared With a Year Ago—A Remarkable Showing.

The quarterly report of the commercial troubles in the United States, as compiled by Bradstreet's, shows that the South has made an excellent record for the first three months of the present year. The total number of failures in this section were 513, a decrease of 116 over the corresponding period of 1897, while the liabilities were $2,822,000, a decrease of nearly $5,000,000. Compared with other sections, this showing is remarkable. In New England, for example, there was an increase in the number of failures of forty-six, while the liabilities increased from $5,165,000 in 1897 to $9,850,000 for the quarter just ended. The number of failures in the Middle States, comprising New York, Pennsylvania, New Jersey and Delaware, was fifty-three less than last year, but the decrease in liabilities was only $1,650,000, or less than one-third recorded for the Southern States, although the total liabilities in the Middle States for 1898 were $13,228,000, nearly five times the amount of the other section. The appended table, by States, reproduced from Bradstreet's, shows the several decreases. That of Texas is especially notable, the total liabilities from 109 failures amounting to but $706,600, or one-third of the total for the preceding year:

	Failures.		Liabilities.	
	1898.	1897.	1898.	1897.
Maryland	33	45	$194,600	$644,467
Virginia	51	88	223,330	1,007,350
West Virginia.	26	23	248,500	467,450
North Carolina	31	31	103,500	228,100
South Carolina	18	20	38,600	107,500
Georgia	56	51	311,453	417,872
Mississippi ...	30	44	136,315	287,980
Alabama	41	23	324,032	846,540
Florida	11	14	10,200	283,495
Louisiana	43	54	178,328	518,518
Texas	109	123	706,600	2,143,000
Tennessee	36	55	174,210	322,000
Arkansas	25	34	163,300	250,920
Dist. of Colum.	3	14	8,900	105,972

April Interest Disbursements.

April disbursements of interest by Southern railway corporations are as follows: Alabama & Vicksburg 6s $30,000, 5s $31,225; Atlanta & Charlotte 7s $17,500; Atlantic, Tennessee & Ohio 6s $4500; Baltimore & Potomac 6s $90,000; Charleston, Clendennin & Sutton 5s $25,000; Chesapeake & Ohio 6s $121,000, 4s $16,400; Chicago & Texas 5s $30,625; Florida Central & Peninsular 5s $50,825; Galveston, Houston & Henderson 5s $50,000; Georgia & Alabama 5s $55,750; George's Creek & Cumberland $16,000; Georgia Midland $24,750; Houston & Texas Central 4s $94,000, 6s $21,000; Illinois Central 6s $75,000, 5s $86,250, 4s $300,000; Kansas City, Pittsburg & Gulf 5s $985,000; Louisville & Nashville 6s $68,000, 7s $247,500; Missouri, Kansas & Texas 5s $62,500; Mobile & Ohio 6s $12,500; Nashville, Chattanooga & St. Louis 5s $138,850; New Orleans & Northeastern 6s $33,600; Southern Pacific 4s $29,150; Norfolk & Carolina 5s $33,000; Norfolk & Western 6s $60,000, 4s $466,500; Ohio River 5s $65,000; Richmond, Fredericksburg & Potomac 4½s $22,500; Richmond & Petersburg 4½s $13,250; St. Louis & San Francisco 5s $27,500; Savannah, Florida & Western 6s $130,000; South & North Alabama 6s $60,000; Southern Railway Branch 7s $17,500; Richmond & Danville 7s $84,000; Baltimore & Ohio Valley Branch 6s $22,500; Western Alabama $34,700; Western North Carolina 6s $123,300; West Virginia & Pittsburg 5s $100,000; Wilmington & Weldon 7s $87,500; Tennessee Coal, Iron & Railroad Co. 7s $10,500, 6s $38,500; Missouri Pacific 5s $748,775, 7s $15,225.

To Increase Its Capital.

The Mercantile Trust & Deposit Co., of Baltimore, will meet on May 3 to decide upon the proposed increase of the company's capital from $1,000,000 to $2,000,000. The success of this corporation and its prominence in financial undertakings in the South have been referred to many times in the Manufacturers' Record. It has been successful in carrying out many important schemes for reorganizing Southern railroads and other corporations, while bond issues aggregating millions of dollars in State, municipal and railroad securities have been floated through its aid. The increase in its capital is deemed necessary in order to meet the requirements of its steadily growing business. It has authority to enlarge its capital to $5,000,000, but with the increase referred to it is thought that enough working capital will be provided to meet present demands. When this is provided for, it will then have a surplus of $3,000,000.

New Corporations.

John R. Lindsay and others have formed the Carolina Insurance Association at Yorkville, S. C.

William Thompson and others have organized the Standard Savings & Loan Association at Dallas, Texas.

John W. Williams and others have formed the Yale Investment Co., with $10,000 capital, at Kansas City, Mo.

The N. D. Allen Investment Co. has been organized at St. Louis, Mo., with $75,000 capital, by N. D. Allen and others.

G. F. Parrott, W. M. Clark and others have organized the Bishopville Investment Co., of Bishopville, S. C., with $10,000 capital.

The Frost National Bank has been organized at San Antonio by C. T. Frost & Co., W. T. Woodhull and others, with $250,000 capital.

The Central Trust Co. of Kansas City has been organized by Garland M. Jones, of West Point, Miss.; J. C. Hill and others, with $100,000 capital.

The Imperial Building and Loan Association has been commissioned to do business in Charleston, S. C., with $150,000 capital. Among those interested are F. T. Hyde and R. G. Rhett.

The People's Building and Loan Association has been authorized to do business at Columbia, S. C., with $200,000 capital. James Woodrow and John T. Sloan are among those interested.

The parties who are organizing the bank at Crawfordville, Ga., have elected John F. Holden, president; J. A. Kendrick, vice-president, and A. F. Griffith, cashier. The capital will be $25,000.

The Bank of Louisa, Va., has been organized for the purpose of doing a discount and savings bank business, with S. D. Crenshaw, president; W. H. Urquhart, vice-president, and Thomas Armstrong, cashier.

The Underwriters' Insurance Co. has been chartered to do business with $240,000 capital. Its headquarters will be at Greensboro, N. C. The officers of this company are: J. Van Lindley, president; E. P. Wharton, first vice-president, and A. W. McAllister, secretary.

New Securities.

E. O. Gowran, of Portage, Wis., is negotiating to purchase the proposed issue of $35,000 in bonds of Americus, Ga.

The city of Raleigh, N. C., may decide upon another issue of $50,000 in bonds for school purposes. J. D. Boushall, chairman of the finance committee, may be addressed.

Messrs. J. B. Oldham & Co., of Dallas, Texas, have purchased $30,000 worth of bridge bonds issued by Williamson county, Texas.

Messrs. Sperry, Jones & Co., of Baltimore, have purchased $90,000 worth of 4½ per cent. refunding bonds issued by the city of Danville, Va.

Charles E. Temple, Grand Rapids, Mich., has purchased the issue of $12,000 in 5 per cent. bonds made by the town of Terrell, Texas, at 101.19.

The board of managers of the Miller Manual Labor School has purchased the issue of $12,000 in 5 per cent bonds of Charlottesville, Va., at 103¼.

The Kansas City, El Dorado & Southern Railway Co. has decided to float bonds to the amount of $450,000 to build a railroad forty miles long in Missouri. O. H. Pitcher is president of the company at Rich Hill, Mo.

Dividends and Interest.

The People's Bank of Greenville, S. C., has declared a quarterly dividend of 2 per cent.

The Columbia Finance & Trust Co. of Louisville has declared a quarterly dividend of 1½ per cent.

The Old Town Bank of Baltimore has

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declared a dividend for the last six months of 4 per cent.

The Farmers' National Bank of Annapolis, Md., has declared a semi-annual dividend of 3 per cent.

The Columbia Finance & Trust Co., of Louisville, Ky., has declared a quarterly dividend of 1½ per cent.

The Virginia-Carolina Chemical Co. has declared a quarterly dividend of 2 per cent., payable at its office in Richmond, Virginia.

The New Observation Cars Between Baltimore and Pittsburg on the Baltimore & Ohio Railroad.

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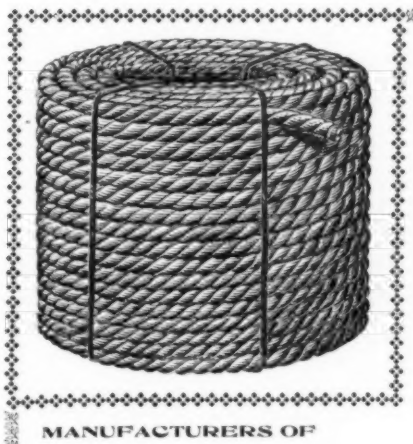

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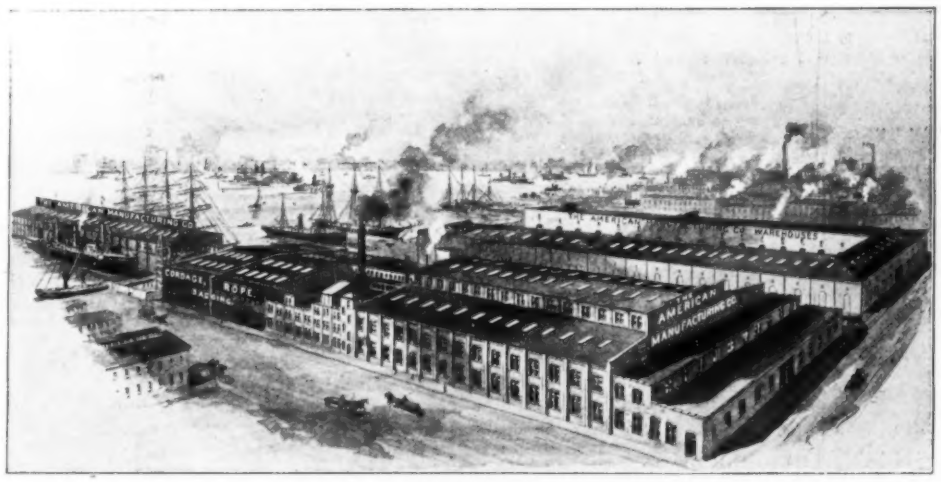

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Bertsch & Co ..... *
Besly, C. H., & Co 38
Biltmore Estate 19
Bird, Wm. M., & Co 6
Birmingham Boiler Works 9
Bliss Co., E. W 9
Block-Pollak Iron Co 22
Boomer & Boschert Press Co 19
Boone, J. R 19
Boston Belting Co 11
Bowe, N. W 20
Bradford Belting Co 11
Bradford Mill Co 12
Bradley Pulverizer Co 35
Bradstreet Mercantile Agency 19
Branson Machine Co 28
Brickenstein, L. B 6
Brobston, Fendig & Co 20
Brooks, T. H., & Co 24
Broomell, Schmidt & Co., Ltd 16
Brown-Bierce Co 31
Brown Hoisting & Con. Mch. Co 23
Brown, Lucius P 6
Buckeye Engine Co 14
Buckeye Iron and Brass Works 28
Buffalo Forge Co 38
Bureau of Freigh' and Transportation, Charleston, S. C 18
Burr Manufacturing Co 9
Bush, T. G 20
Bushnell, G. H., Press Co 28
Byers, Jno. F., Machine Co 23

C

Cady, C. N 8
Caldwell, H. W., & Son Co 4
Calera Lime Co 6
Cameron, A. S., Steam Pump Wks 32
Cameron & Barkley Co 34
Campbell & Zell Co 19
Capital City Machine Works 9
Carborundum Co 13
Card Electric Co 36
Cardwell Machine Co 28
Carlin's, Thomas, Sons 22
Carnell, George 12
Caroline Iron Works 34
Carver Cotton Gin Co 28
Case Mfg. Co 23
Castner, Curran & Bullitt 10
C. & B. Line 31
Chambersburg Engineering Co 26
Chance, G. W., & Co 6, 22
Chapman, Wm. A., & Co 6
Chapman Valve Mfg. Co 33
Charlotte Machine Co 29
Chattanooga Fdy. & Pipe Works 33
Chattanooga Machinery Co 26
Chattanooga Steel Roofing Co 24
Chesapeake Belting Co ..... *
Chester Steel Castings Co 13
Chicago Belting Co 10
Christiana Machine Co 33
Chrome Steel Works 13
Cincinnati Corrugating Co 25
Cin., Hamilton & Dayton R. R ..... ‡
Cincinnati Safe & Lock Co 8
Clark, W. J., Co 13
Clayton Air Compressor Works 38
Cleveland, Lorain & Wheeling Ry. 31
Cleveland Wire Spring Co 4
Climax Mfg. Co 13
Coburn Trolley Track Mfg. Co 27
Cohoes Iron Fdy. & Mch. Co 29
Columbia Water Power Co 20
Columbus (Ga.) Board of Trade 20
Columbus Machine Co 9
Commercial Electric Co 36
Commercial Wood & Cement Co 6
Consolidated Steel & Wire Co 24
Contractors' Plant Mfg. Co., Ltd 23
Cordesman Machine Co 26
Cordesman, Meyer & Co 27
Cornman Co 21
Cortright Metal Roofing Co 25
Covert Mfg. Co 23
Cox, Justice, Jr 21
Crompton & Knowles Loom Wks. 4, 29
Cronk Hanger Co ..... †
Crosby Steam Gage & Valve Co 17
Crouse-Hinds Electric Co 4
Curtis & Marble Machine Co 29
Cutler Mfg. Co 9
Cypress Lumber Co 33

D

Dallett & Co 22
Dana, W. K 20
Davis & Egan Mch. Tool Co 12
Davis Coal & Coke Co 10
Davis, Franklin F 26
Davis, G. M., & Son 33
Dean Bros. Steam Pump Works 32
Dempwolf, C. H., & Co ..... †
Dessau, S., Co 35
Detroit Lubricator Co 15
Disston, Henry, & Sons ..... †
Dixon, Jos., Crucible Co 38
Donald 21
Dopp, H. Wm., & Son 18
Dow Wire Works Co 24
Draper Co 28
Draper Machine Tool Co 12
Dufur & Co 24
Dunbar, R., & Son 34
Dunning, W. D 19

E

Easton & Burnham Machine Co 29
Eccles, S., Jr ..... *
Egan Co ..... *
Electrical Engin'ring & Supply Co. 37
Ellis & Helfenberger 24
Empire Paint & Roofing Co 24
Erikson, Edward E 6
Etting, Edward J 19
Eureka Fire Hose Co 11
Everson, B. M 21
Exchange Banking & Trust Co 19

F

Fairmount Machine Co 28
Farquhar, A. B., Co., Limited 26
Fay, J. A., & Co 27
Fay Manilla Roofing Co 25
Featherstone's, John, Sons 16
Fernandina Oil & Creosote Works. 22
Fifield Tool Co 12
Fitz-Hugh & Co 22
Foos Gas Engine Co 15
Foos Mfg. Co 34
Forbes, W. D., & Co 16
Forsaith, S. C., Machine Co 26
Fort Wayne Electric Corporation 37
Fossick Co., T. L 6
Fox Portable Elevator & Rack Co. 24
Freese, E. M., & Co ..... *
French, Saml. H., & Co 24
Frick Co 14
Froehling, Dr. Henry 6
Frontier Iron Works 15
Fuel Economizer Co ..... *
Fulton Bag and Cotton Mills 21
Funkhouser, Saml 19

G

Galt, John, & Sons 25
Gandy Belting Co 11
Garrett-Buchanan Co 25
Garrett, C. S., & Son 25
Gary, James A 19
Gedge Bros. Iron Roofiong Co 25
General Fire Extinguisher Co 6
Gilbert, C. M. & Co 6
Glaskin, George F., & Co 6
Globe Machine Works 17
Golden's Foundry & Machine Co 27
Gowdey, J. A., & Son 28
Graphite Lubricating Co 16
Grasty, Robt. Ware 21
Gregory Co., Chas. E 21
Griffing, A. A., Iron Co 4
Grosse, L., Art Glass Works 24
Guilfoux & Blanc 6

H

Haines, Jones & Cadbury Co 38
Haines, William S., Co 4
Hales & Ballinger 6
Hall Steam Pump Co 32
Hambleton & Co 197
Hammacher, Schlemmer & Co 13
Hanahan, J. Ross 6
Hansell Spring Co 12
Hanson & Van Winkle Co 36
Harrington & King Perforat'g Co 4
Harrisburg Mfg. & Boiler Co 16
Hartford Steam Boiler Inspection & Insurance Co 8
Hartley's Boiler Works 15
Hartzell Novelty Works 19
Hayden, J. M., & Co 10
Hazard Mfg. Co 10
Helios Electric Co 36
Help Wanted 31
Hemphill, F. B 20
Hench & Dromgold 26
Hendrick Mfg. Co., Limited 10
Hickman, Williams & Co 22
Hiertz, Theo., & Son 13
High Point Machine Works 14
Hirsch, L. K 22
Holmes, E. & B., Machinery Co 26
Holmes Fibre Graphite Mfg. Co ..... *
Holt, E. J 20
Holt, S. L., & Co 21
Homer, F. E., & Co 36
Hoopes & Townsend 23
Howard, B. C 6
Howes, S., Co 12
Huther Bros ..... †
Hutton Engineering Co 6

I

India Alkali Works 28
Ingersoll-Sergeant Drill Co 18
International Corres. Schools 6
International & Gr. Northern Ry 31
Interstate Law Association 21

J

Jackson Mfg. Co 23
Janney & Steinmetz 19
Jeanesville Iron Works Co., Inc 32
Jeffrey Mfg. Co 8
Jenkins Bros 38
Jewell Belting Co 11
Johns, H. W., Mfg. Co 25
Johnson, Edwin Lehman ..... *
Johnston & Nelson 20

K

Kaiser, A. V. & Co 22
Keeler, E., Co 15
Kelly, O. S., Co., The 35
Kelly & Jones Co ..... *
Kennedy, F. A 20
Keystone Crusher & Roller Co 35
Keystone Drop Forge Co 8
Kiechler Mfg. Co ..... †
Kilbourne & Jacobs Mfg. Co 38
Kilburn, Lincoln & Co 28
Klipstein, A., & Co 28
Knox, Henry E., Jr 19

L

Lambert Gas & Gasoline Eng. Co. 15
Lambert Hoisting Engine Co 14
Lane Manufacturing Co 26
Lathbury, Spackman & Bache 6
Lawrence, W. W., & Co 2
Leffel, James, & Co 33
Lehigh Valley Brass Works 16
Lewis, H. F., & Co., Ltd 28
Lidgerwood Manufacturing Co 23
Link-Belt Engineering Co 8
Lobdell Car Wheel Co 8
Lombard Iron Wks. & Supply Co 15
Lowell Machine Shop 28
Lowell Textile School ..... †
Ludlow-Saylor Wire Co 24
Ludlow Valve Mfg. Co 33
Lunkenheimer Co 38
Lyon, A. I., & Co 22

M

Macfarren, S. J 6
Main Belting Co 10
Makepeace, C. R., & Co 6
Marion Steam Shovel Co 2
Martin, Hy., Brick Mch. Mfg. Co 12
Maryland Casualty Co 197
Maryland Cement Co 6
Maryland Mfg. & Construction Co. 17
Maryland Trust Co 197
Mason Machine Works 28
Mason Regulator Co 32
McCabe, J. J 21
McClave, Brooks & Co 17
McClure, J. H., & Son 21
McCoy, Joseph F., Co 8
McCully, R 35
McDonald, John, & Sons 6
McGowan, John H., Co 32
McKenna, David ..... †
McLanahan & Stone 35
Mead, Y. A., Cycle Co 31
Mecklenburg Iron Works 14
Means & Fulton Iron Wks 15
Mercantile Trust & Deposit Co 197
Merchants & Miners' Transp. Co 31
Meyer, Dr. Otto 6
M. F 21
Middendorf, Oliver & Co 197
Middletown Machine Co 15
Milburn, Frank P 6
Miles, Franklin S 9
Miller Bros. & Co 6
Mitchell Tempered Copper Co 37
Mitshkun, M., & Co 22
Monroe Ry. & Construction Co 19
More, Jones & Co 9
Morgan Spring Co 9
Morse Twist Drill & Mch. Co 12
Morse, Williams & Co 17
Mueller, H., Mfg. Co 33
Muirhead, John, & Sons ..... *
Muirhead Machine Works 35
Mundt & Sons 2
Munson Bros 34
Murphy, John, & Co 9
Murray Iron Works Co 14
Murray, James, & Son 35

N

National Paint Works 24
National Pipe Bending Co 17
National Roofing & Supply Co 25
New Atlantic Hotel 31
Newburg Ice Mch. & Engine Co 16
New Columbus Bridge Co 25
New England Railroad ..... ‡
N. J. Car Spring & Rubber Co 10
New Jersey Zinc Co 18
Newport News Shipbuilding & Dry Dock Co 14
New Rapid Dry Kiln Co 27
Newton Hosiery Mill 20
New York Equipment Co 22
Niagara Machine & Tool Works ..... *
Nicholson File Co ..... *
Nordyke & Marmon Co 35
Norrish, Burnham & Co 33
North American Metaline Co 23
North American Trust Co 197
Northern Electrical Mfg. Co 37
Norton, C. H 25
Norton Emery Wheel Co 13

O

Ober Lathe Co 26
Otto Gas Engine Works 14

P

Pancoast, Henry B., & Co 23
Parkhurst Bros. & Co 9
Paxson, J. W. Co 2
Peacock, Geo 22
Peck-Hammond Co ..... *
Penberthy Injector Co 38
Pettee Machine Works 29
Phila. Machine Screw Works ..... *
Philadelphia Steel Roofing Co 25
Piedmont 19
Pittsburg Feed-Water Heater & Engineering Co 17
Pittsburg Locomotive Works ..... *
Pittsburgh Plate Glass Co 25
Playford Stoker Co 15
P. O. Box L 19
Pomona Terra Cotta Co 8
Pope Mfg. Co 30
Porter, H. K., & Co 13
Poulterer & Co 22
Powhatan Clay Mfg. Co 8
Praray Chas. A. M., & Co 6
Pratt, N. P., Laboratory 6
Pratt & Whitney Co 12
Price & Co 22
Price & Heald 22
Priestman & Co., Inc 15
Providence Machine Co 29
Pulsometer Steam Pump Co 32

Q

Queen City Printing Ink Co 30
Queen City Supply Co 17

R

Radford, Va., Board of Trade 20
Rand Drill Co 32
Rawson Electric Co 37
Record Printing House 12
Reed, F. E., Co 12
Reid, Thorburn 6
Reliance Gauge Co ..... *
Remington Machine Co 16
Reuter & Mallory 21
Rhoads, J. E., & Sons 11
Riley's, John F., Machine Works 21
Riter-Conley Co 6
Roanoke Navigation & Water Power Co 20
Robbins & Myers Co 37
Robertson, Jas., Mfg. Co 34
Robins, A. K., & Co 9
Robinson, J. M., & Co 24
Robinson, Wm. C., & Son 10
Robinson & Orr 22
Rossendale-Reddaway Belting & Hose Co 11
Royal Bag Mfg. Co ..... †
Ruger, J. W., Mfg. Co 15
Russell & Co 35

S

Sabel Bros 22
Samson Steel Belt Hook Co 18
Samuel, Frank 21
Sanderson, John ..... *
Saunders', D., Sons 13
Schieren, Chas. A. & Co 11
Schneider & Trenkamp Co 17
Schneider Mfg. Co 4
Scott & Williams 28
Scranton Corundum & Emery Wheel Works 13
Secretary Chamber of Commerce 20
Seidel, R. B 4
Seidel, R. D 8
Shawhan-Thresher Electric Co 6
Shields, W. H 20
Simpson, H. P 35
Simpson, J. S. & G. F 34
Sinclair, S. H., Co 8
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Slatington-Bangor Slate Syndicate. 38
Smethurst & Allen 37
Smith-Courtney Co 9
Smith, E. M 20
Smith, H. B., Machine Co 26
Smith, Robert H 19
Smith, S. Morgan, Co 33
Smith & Kilby Co 22
Snow Steam Pump Works 32
South Bend Spark Arrester Co 9
Southeastern Lime & Cement Co 6
Southern Expanded Metal Co 25
Southern Fdry. & Mch. Works 21
Southern Iron & Equipment Co 22
Southern Railway Co 31
Southern Real Estate Exchange 21
Spear's, Alden, Sons & Co 24
Springfield Gas Engine Co 15
Sprout, Waldron & Co 34
Stafford, F. M., & Co 197
Standard Coal Co 10
Standard Oil Co 25
Standard Paint Co 25
Standard Saw Mill Machinery Co 26
Standard Scale & Supply Co., Ltd 31
Stanley Electric Mfg. Co 36
Starr, B. F., & Co 34
Steamship 20
Stebbins, Wallace 14
Steel Rail Supply Co 22
Steele, J. C., & Sons 38
Sterling Emery Wheel Mfg. Co 35
Stevens', H., Sons Co 38
Stewart, James & Co 6
Stiles, E. S., Press Co., The 9
Stilwell-Bierce & Smith-Vaile Co 30, 32
Struthers, Wells & Co 14
Stuebner, G. L., Iron Works 8
Sturtevant, B. F., Co 29, 30
Sturtevant Mill Co 34
Sullivan Machinery Co 35

T

Tanite Co 38
Taylor, A. W., Land & Lumber Co. 21
Taylor, James Knox 19
Thayer, J. A., & Co 21
Thompson, J., & Sons, Mfg. Co 15
Thompson & Bushnell 16
Toledo Machine & Tool Co 24
Toomey, Frank 21
Tower & Wallace 6
Trenton Iron Co 10
Trevor Mfg. Co 26
Triumph Electric Co 36
Tudor Boiler Mfg. Co 15

U

Union Iron Works Co 22
United Electric Improvement Co 37

V

Valdosta Foundry & Machine Co 18
Valk & Murdoch Iron Works 15
Vanduzen Co., E. W 33
Viaduct Brass Works 16
Vitrified Emery Wheel Co 13
Vulcan Works 28

W

Walker & Allan 9
Walker & Elliott 34
Warren Chemical & Mfg. Co 24
Watkins & Hardaway 6
Watson, Benjamin 22
Webster, Warren, & Co ..... *
Weir Frog Co 10
Wells Light Mfg. Co 23
West Mfg. Co 10
Western Electric Co 29
Western Electrical Supply Co 37
Western Maryland Railroad 31
Westinghouse Air Brake Co 2
Westinghouse Elec. & Mfg. Co 36
Westinghouse Machine Co 14, 21
West Pascagoula Creosote Works 22
Wetherill, Robt., & Co 13
Whaley, W. B. Smith, & Co 6
Whitinsville Spinning Ring Co ..... *
Whitney, Baxter D 27
Willcox, W. A 21
Wilkinson Mfg. Co 15
Williams Bros 32
Williams, Haskins, & Co 22
Williams, I. B., & Sons 10
Williams, J. H., & Co 13
Williams, John L., & Sons 197
Williams & Schmid ..... †
Willis, E ..... *
Wilson Laundry Machinery Co 8
Wolf Co., The 17
Wolf Co., Fred. W 16
Wood, R. D., & Co 33
Worthington, Henry R 18
W. P. H 21
Wright Co., The 12
Wrightsville Hardware Co 18
Wyckoff, Seamans & Benedict 8

Y

York Mfg. Co 16

Z

Zier & Co., M 9

Ads. marked thus * appear every other week.
Ads. marked thus † appear in first issue of each month.
Ads. marked thus ‡ not in this issue.

PROPOSALS.

TREASURY DEPARTMENT, Office Supervising Architect, Washington, D. C., March 22, 1898.—Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of April, 1898, and opened immediately thereafter, for all the labor and materials required for the Interior Finish, Plumbing, Gas Piping and Approaches for the U. S. Courthouse, Postoffice, etc., at Savannah, Ga., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at Savannah, Ga. JAMES KNOX TAYLOR, Supervising Architect.

POST OFFICE DEPARTMENT.
WASHINGTON, D. C., April 5, 1898.

SEALED PROPOSALS will be received at this Department until Thursday, May 5th, 1898, at 2 o'clock P. M., for furnishing for the use of its Mail Equipment Shops, such supplies, consisting of wire, rivets, burrs, emery, steel, chemicals, oils, leather, thread, etc., in such quantities of the different articles respectively, and at such times and from time to time, as they may be ordered during the fiscal year, beginning July 1st, 1898.

A complete list of the articles desired, with full specifications and form of proposal, will be furnished upon application to Second Assistant Postmaster-General.

JAMES A. GARY,
Postmaster General.

PROPOSALS FOR FURNISHING REGISTERED PACKAGE, TAG, OFFICIAL AND DEAD-LETTER ENVELOPES.

POST OFFICE DEPARTMENT,
WASHINGTON, D. C., March 26, 1898.

SEALED PROPOSALS are invited, and will be received at this Department until 12 M. on Thursday, the 5th of May, 1898, for furnishing such Registered Package, Tag, Official, and Dead-Letter Envelopes as may be ordered for the use of the Department, postmasters, and the postal service during a period of one year, beginning on the first day of July, 1898.

Proposals must be made on the blank forms provided by the Department, securely enveloped and sealed, indorsed "Proposals for furnishing Registered Package, Tag, Official, and Dead-Letter Envelopes," and addressed to the Third Assistant Postmaster General, Washington, D. C. Bids delivered in person must be handed in at or before the hour above specified for the receipt thereof; otherwise they will not be considered.

Blank forms of proposal, with full specifications and samples of the envelopes will be furnished upon application to the Third Assistant Postmaster General.

JAMES A. GARY,
Postmaster General.

PROPOSALS FOR FURNISHING ENVELOPES FOR THE SEVERAL EXECUTIVE DEPARTMENTS DURING THE YEAR ENDING JUNE 30, 1899.

POST OFFICE DEPARTMENT,
WASHINGTON, D. C., March 26, 1898.

By the 96th Section of the Act of Congress approved January 12, 1895, it is made the duty of the Postmaster General to contract for all Envelopes, both plain and printed, to be used "by his own or other Departments."

Under this authority proposals are hereby invited and will be received at this Department until 2 P. M., on Thursday, the 5th day of May, 1898, for furnishing such Envelopes as the several Executive Departments in Washington may require during the year ending June 30 1899.

Proposals must be made on the blank forms provided by the Department, securely enveloped and sealed, indorsed "Proposals for furnishing Envelopes for the several Executive Departments," and addressed to the Third Assistant Postmaster General, Washington, D. C. Bids to be delivered in person must be handed in at or before the hour above named; otherwise they will not be considered.

Blank forms of proposal, with full specifications, will be furnished upon application to the Third Assistant Postmaster General.

JAMES A. GARY,
Postmaster General.

PROPOSALS FOR MISCELLANEOUS SUPPLIES FOR THE POST OFFICE DEPARTMENT.

POST OFFICE DEPARTMENT,
WASHINGTON, D. C., April 5, 1898.

Sealed proposals will be received at this Department until Thursday, the 5th day of May, 1898, at 2 o'clock P. M., at which time and place they will be opened in the presence of bidders or their authorized agents or attorneys, for furnishing the Department with such coal, wood, ice, carpets, chairs, cotton cloth (for map mounting), soap, closet paper, dusters, corn brooms, and forage, as may be ordered during the fiscal year beginning July 1, 1898, and ending June 30, 1899.

Bids are also invited for the purchase of waste paper from the Department; old jute, old cotton canvas, old string, jute heads with rings, and scrap leather from the Mail Equipment Division, and for washing towels.

Blanks for proposals, with specifications giving detailed statements of the requirements to be met in respect to each article, and also the estimated quantities probably to be required of each, and giving full instructions as to the manner of bidding and the conditions to be observed by bidders, will be furnished on application to the Disbursing Clerk and Superintendent, Post Office Department, Washington, D. C.

The Postmaster-General reserves the right to reject any or all bids, to waive technical defects, and to accept any part of any bid and reject the other part.

JAMES A GARY,
Postmaster-General.

PROPOSALS FOR SUPPLIES FOR THE POST OFFICE DEPARTMENT AND POSTAL SERVICE.

POST OFFICE DEPARTMENT,
WASHINGTON, D. C., April 2, 1898.

Sealed proposals will be received at this Department until Thursday, May 5, 1898, at 2 o'clock P. M., for furnishing wrapping paper, wrapping paper for facing slips, twine, letter scales, postmarking and rating stamps, rubber stamps, cancelling ink, pads, paper, rubber goods, pens, pen holders, pencils, ink, mucilage, glass goods, rulers, articles of steel, rubber erasers, books, typewriter supplies and miscellaneous stationery, in such quantities of the different articles respectively, and at such times, and from time to time, as they may be ordered, during the fiscal year beginning July 1, 1898, and ending June 30, 1899, for the use of any branch of the departmental or postal service.

Blanks for proposals, with specifications giving detailed statements of the requirements to be met in respect to each article, and also the estimated quantities probably to be required of each, and giving full instructions as to the manner of bidding and the conditions to be observed by bidders, will be furnished on application to the Superintendent of the Division of Post Office Supplies, Post Office Department, Washington, D. C.

The Postmaster-General reserves the right to reject any or all bids, to waive technical defects, and to accept any part of any bid and reject the other part.

JAMES A. GARY,
Postmaster-General.

Bids Wanted on

Railroad Construction.

The undersigned owners of franchise to build a railroad extending from Monroe, La. to Parish of Natchitoches, La., 89 miles, desire bids from contractors to build the above railroad. Work to commence by May 1st, 1898. Railroad line traverses undulating long leaf pine country until the fertile valley of the Red River is reached. Franchise is valuable. Address

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L. D. M. Lain, Prest.

Proposals for the Installation of the Plumbing in New Courthouse, Baltimore City, Md.

Office of Courthouse Commission,
City Hall. March 16, 1898.

Sealed proposals will be received at this office until 3 P. M. of MONDAY, April 25, 1898, and immediately thereafter opened, for the INSTALLATION OF THE PLUMBING IN THE NEW COURTHOUSE FOR BALTIMORE CITY, now in course of erection.

Copies of the drawings and specifications may be seen on and after Monday, March 25, 1898, by those desiring to submit proposals, at the office of the Inspector of Buildings, City Hall; at the office of the Architects, Wyatt & Nolting, 4 E. Lexington Street; at the rooms of the Builders' Exchange, Baltimore, or a copy of the Drawings and Specifications will be furnished on application and payment of $25, of which $20 will be refunded upon the return of the same complete. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal, made out to the order of the Mayor of Baltimore City.

The right is reserved to reject any or all bids, and to waive any defects or informalities in any bid should it be deemed to the interest of the city to do so. All bids received after the time stated will be returned unopened.

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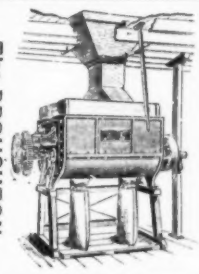

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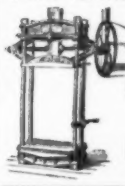

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IRON AND STEEL PLATES,
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Standard Gauge 36-ton Baldwin Locomotive

in excellent condition. Cylinders 16x24 inches diameter. Eight-wheel tender; 2000 gallons capacity, with sloping back. For terms address

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Managers of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises and needing machinery or supplies of any kind will find it profitable to consult the advertising columns of the Manufacturers' Record. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

FOR SALE—NEW STEAM PIPE.

10 ft.	6 in.....	1¼ in. pipe.
62 ft.	9 in.....	3½ in pipe.
7 ft.	6 in.....	4½ in pipe.
17 ft.	[illegible] in.....	6 in. pipe.
18 ft.	10 in.....	8 in. pipe
4 ft	7 in.....	9 in pipe.
262 ft	2 in.....	10 in. pipe.
241 ft	4 in.....	12 in. pipe.

SECOND-HAND PIPE.

940 ft.	.....	2 in. pipe.
1086 ft.	10 in.....	3 in. pipe.
118 ft.	8 in.....	4 in. pipe.

All in good condition. Threads protected.

CAMPBELL & ZELL COMPANY,
Mfrs Water Tube Boilers, BALTIMORE, MD.

RECEIVER'S SALE--Gainesville, Ga.

Finger & Shelly Shoe Factory to be disposed of.

I will sell at public outcry **on May 3, 1898**, in Gainesville, Ga., before the Courthouse door, within the legal hours of sale, provided not sooner sold at private sale, the Finger & Shelly Shoe Factory, together with all the Machinery contained therein, Boiler, Shafting, Belts, Tools, etc

The lot is near in and fronts two streets, containing about one acre. The buildings are of wood, tin roof. The main room, 36x210 feet, with L 30x42, besides basements, office, boiler room, etc. **Capacity 600 pairs per day.**

Further information and full list of all the property will be furnished by the Receiver. Terms of sale cash, on confirmation by the Judge Superior Court. J. R. BOONE, Receiver of Finger & Shelly Mfg. Co.

RARE OPPORTUNITY.

FOR SALE.

An Up-to-Date **Foundry & Machine Shop,**

AT ROME, GA.

Owing to the death of the owner, and the consequent necessity of winding up the estate for distribution, the J. A. George Foundry and Machine Works, of twenty years' standing, with an established and remunerative patronage, are offered for sale at a bargain. The business is now being run successfully by the administrator of the estate.

Address for price, terms and particulars.

SAM'L FUNKHOUSER, Administrator,
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A First-Class Canning, Pickling and Preserving Factory.

Unlimited supply of raw material.
Ten thousand acres in fruits and gardens.
Center of Gulf Coast Fruit Belt.
Located midway between Houston and Galveston, Texas.
A fine manufacturing point.
Best shipping facilities.
Correspondence solicited.
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Alvin Business League,
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PARTY with suitable buildings, power, and some capital, wishes to associate experienced parties with machinery in Textile or Hosiery manufacture. Desirable location; Piedmont Section, Va. Plenty of labor. Address **PIEDMONT,** care Manufacturers' Record, Baltimore, Md,

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Up-to-date Wheel Factory

in one of the best Southern cities. 5 railroads. Capacity 150 sets of wheels per day. 10,000 finished spokes per day. Best of material right at door at cord-wood prices. Address

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Mill capacity, 25,000 feet. Abundant Poplar and Oak on river at $2 to $3 per thousand stumpage. Falls below mill give plant control of all timber on upper river. Will sell cheap. Address

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20,000 Electric H. P.

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125 Feet Fall at Columbus, Ga., in Chattahoochee River.

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Large Operative Population. Temperate Climate.

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8000 acres coal lands in Alabama for sale at **very** low price, address

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TWO MILLIONS ACRES LAND FOR SALE.

In Alabama, Florida, Mississippi and Texas.
Dry, Healthy, Fertile and Well Timbered.
YELLOW PINE LANDS A SPECIALTY.

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UNLIMITED ELECTRIC POWER

in large or small units for manufacturing purposes. Columbia is in the centre of the cotton producing country. Low freight rates to all points. An ideal manufacturing location.

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The Place for Factories.

Central location between extreme North and South. Climate perfect. City very healthy. Surrounded by the most productive cotton and rice plantations and truck farms. One lives cheaply in Wilmington and consequently labor is cheap also. Our city is the best situated on the South Atlantic Coast for factories of all descriptions, it has the lowest freight rates in the entire timber and cotton belt. Our cotton mill runs day and night, **and new factories are exempt from taxation for ten years.**

For further information write to the
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A Good Chance for a Cotton Factory.

50 acres with ample buildings, one 100-horse-power steam engine and boiler. The above property is all new and is known as the Shreveport Fair Grounds. Address

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VALUABLE COTTON MILL FOR SALE.

The undersigned offers for sale the
ROSALIE MILLS COMPANY'S PROPERTY
at Natchez, Miss.,
including buildings, tenements and machinery.
Production 3000 pounds per day.
Machinery of latest design and in first-class order.
Address for particulars and terms

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IMPROVED WATER POWER

for COTTON MILL in Central North Carolina FOR SALE. Address **E. J. HOLT, Smithfield, N C.**

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Manufacturers who are contemplating removing their plant or establishing a branch factory are invited to investigate the superior advantages possessed by the

Roanoke Navigation & Water Power Co.

The third largest power in the United States, situated at WELDON, N. C., at the junction of the Seaboard Air Line and Atlantic Coast Line.

2000 HORSE POWER NOW READY for immediate use and capable of development to almost any extent, situated at the head of navigation of Roanoke River and junction of Atlantic Coast Line and Seaboard Air Line, INSURING FIRST-CLASS SHIPPING FACILITIES TO ALL POINTS AND LOW FREIGHT RATES. Absolutely free from interference by high water.

Good manufacturing sites for various industries are available. **2,000,000** brick on hand and a yard sufficiently large to supply any demand. Weldon is in the centre of the RICHEST COTTON LAND IN THE SOUTH, **200,000** BALES COTTON BEING PRODUCED ANNUALLY.

This section is RICH in TIMBER and WOOD for manufacturing purposes, as well as for making acetate of lime cf potash. Boats using 3½ feet water can go up the river from our power site for 30 miles, developing a valuable timber country that has not been penetrated.

FOR THE ESTABLISHMENT OF AN ICE FACTORY no better location can be found, having a territory of a radius of 50 miles, containing a population of 400,000

LABOR is INTELLIGENT, ABUNDANT and CHEAP. ALL DESIRABLE and NEEDED ADVANTAGES.

Our power can be bought or leased at reasonable rates. Will take pleasure in answering all requests for detailed information. Address

Roanoke Navigation & Water Power Co.
JAS. W. WILSON, Prest. & Gen. Mgr.
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Complete Knitting Mill

Machinery Outfit.

Capacity about 400 dozen a week of misses and ladies ribbed hose and men's half hose. All necessary dyeing machinery, building, etc. Located in a growing town with good railroad facilities, cheap labor, fuel, etc. Will be sold privately, or if not sold by May 2d, will be sold at auction that day. For further information address

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Southern Cotton Mill WANTED.

A practical cotton manufacturer would buy one-half interest in a cotton cloth or yarn mill of five to ten thousand spindles. Or would arrange with a company having a good mill with latest make of machinery who are in need of financial assistance to loan the amount needed, interest and security being satisfactory, and take management of mill during time of loan.

Address **A. B. C.**, care of this paper, giving full description of property: also price.

State make of machinery and how long in use.

RADFORD, Virginia.

Parties desiring to start new enterprises or change location, are invited to investigate Radford, Va. Good climate, water and drainage, elevation, 1800 feet. On Norfolk & Western Ry. at junction of Columbus, O., and Pocahontas Coal Fields divisions, as well as Southern connection via Knoxville, Tenn. In midst of fine agricultural country and 25 miles from ore fields. Population, 4000, churches, public and private schools, electric light and car line. Ice plant and other manufactures.

Responsible parties are offered inducements, including no city taxes for five years. Address

G. T. KEARSLEY,
Secretary Board of Trade,
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FOR SALE.

Complete New Hosiery Mill Machinery Outfit.

Capacity over 100 dozen a day. Has not been run two years. Cost $14,000. Will sell for $8000 cash. Apply to

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The works of Talbott & Sons Co., with the plant and good will, which have been in operation more than 50 years, well equipped for the manufacture of engines, boilers, saw mills and machinery generally. To be sold at auction on April 28, 1898. The works are located on Cary Street, and cover about two acres of ground. For full particulars apply to

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Cotton Machinery

FOR SALE.

Apply **New York Office, 18 Walker Street,**
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Plant of 40,000 spindles being sold.

CARDING, SPINNING, WARPING, WINDING and WEAVING MACHINERY.

All in Excellent Condition.

PRICES LOW.

Send for complete list.

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Planing Mill Machinery and Manufacturing Plant, Double Story Building covering 5 city lots, located in heart of city on two main railroad lines.

Building admirably equipped for wood manufacturing purposes, all being in perfect order and ready for operation. Abundance and low price of raw material, together with low freight rates to jobbing centers, makes this an unexcelled point for wood manufacturing plant. Detailed particulars furnished on request.

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Situated on Shoal Creek, in Lawrence County, Tenn., four miles from Lawrenceburg, Tenn., on the Nashville and Florence Railroad. The Mill is run by water with a fourteen foot fall. There is about 2000 acres of land, 1700 well timbered, connected with the Mill property, which can be bought at a bargain. Also 49 acres of rich land on edge of corporate limits of Nashville, Tenn., suitable for Market Garden, there is a two-story brick house in good repair on premises. For further description address

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150 brl. mill wanted at Rutherford, Tenn. In centre of fine wheat country. Practically no competition. Liberal bonus to right parties. Address

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A LARGE Steamship Co. of Northern Europe having lines in America is desirous of expanding the business of these lines by interesting a limited amount of American capital, dividends for the past twenty years have averaged over 8%. Address for information STEAMSHIP, care Manufacturers' Record.

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General law practice. Collections, loans, money invested, options secured and information furnished concerning Southern properties of all kinds.

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Are the Best.

Charter is good in any state, no liability, signers furnished saving you $40, consultation free.

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Incorporate Your Business.

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No Personal Liability. Non-Assessable Stock.
Plan mailed on application.
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Single Span Railroad Track Bridge, 150 feet long, built by Cofrode & Savlor in 1879; first-class condition to put up elsewhere. Address

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Gentleman having ten years experience in export commission trade, conversant with Spanish, French, German and foreign market requirements, would represent manufacturers to foreign trade, or take charge of export department for A1 firm; is competent to act as resident buyer. Address "DONALD," Box 21, 1401 Third avenue, New York.

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Latest invention, Automatic, Ball Bearing, Compound Leverage, Self Contained. No gear wheels or springs. Full circle, Simple in construction, efficient in service. Write, prices, discounts.

ALABAMA FOUNDRY & MACHINE WORKS,
NEW DECATUR, ALA.

WANTED.

Machinery to Manufacture

We have a thoroughly equipped Machine shop, Carpenter Shop and Foundry, and can do all classes of Machine Work very reasonable. Try us.

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A PARTNER

in a well-established wagon manufacturing business, situated in a progressive Southern city of 20,000 inhabitants. $6000 buys a half interest. Money is needed to increase the plant so as to take care of increasing business.

For further information address W. P. H. care Manufacturers' Record.

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26,000 ACRES OF LAND,

From 4 to 16 miles from Summerville, S. C. a noted health resort, containing long and short leaf pine, oak, hickory ash, cypress, etc. Contains excellent farming and pasture land, and is convertible into a game preserve. Also second-hand machinery in good order.

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SUMMERVILLE, S. C.

TIMBER LAND.

21,000 Acres Virgin Forest in best timbered section of West Virginia. Experts measured off several one acre blocks on N., S., E. and W. portions of this tract, and then *measured* the timber thereon, using Scribner's Lumber and Log Book. Best acre measured 80,027 feet B. M.; thinnest acre, 19,964 feet; general average, 39,271 feet per acre, divided as follows, viz: Hemlock, 19,016 feet; Spruce, 11,358 feet; Cherry, 2,778 feet; Maple, 2,077 feet; Birch, 1,212 feet, Sugar, 948 feet; Ash, 794 feet; Beech, 818 feet, and Cucumber, 270 feet. Total amount of merchantable timber on this tract (approximated)

863,962,000 FEET.

The Title is Guaranteed to be Absolutely Perfect.

Price and terms very reasonable. Sworn statement of the experts and detailed information sent upon application to **THE SOUTHERN REAL ESTATE EXCHANGE, Clarksburg, W. Va.**

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7000 Acres of Yellow Pine Timber Lands, on the Georgia Coast.
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JUSTICE COX, JR.

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Automatic Engines and Boilers

in great variety at low prices. These engines have been all rebuilt, are practically equal to new. Send for quotations. State just what you need.

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FOR SALE.—1 80 H. P. Poole & Hunt Engine; 3 60 H. P Return Tubular Boilers; 2 Iron Tanks, 9 ft. dia. x 9 ft. deep; 2 Iron Tanks, 6 ft. sq. x6ft. deep; 300 ft. of 6 in. Cast Iron Pipe with flanges on ends; all as good as new; can be bought cheap. If in need of new or second-hand machinery of any kind write me, I can supply your wants. If you have machinery of any kind for sale send me a list of it, I can sell it for you.

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DYNAMOS IN STOCK.

Incandescent—16, 30, 35, 40, 50, 60, 100, 125, 150, 200, 250, 300, 350, 425, 450, 500, 540, 650, 750, 1000 Light.
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All of Standard makes, principally Edison, Thomson-Houston, Westinghouse, Brush. Send for monthly BARGAIN SHEET giving complete list with prices. Also Motors, Arc Lamps, Instruments and Supplies

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2 practically new E. P. Allis & Co. Compound Tandem Corliss Engines, 20 in. high, 30 in low pressure, cylinders 48 in. stroke, shafts 12 in. diameter, 14 ft. long, fly wheels 24 ft. diameter, 76,000 lbs. each; will be sold at a bargain before removal.

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One second-hand "BERRYMAN" HEATER AND PURIFIER, in perfect condition and guaranteed good as new. Will sell cheap for cash Address

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ENGINES for Blast Furnaces, Foundries, Converters and Rolling Mills. MILL TRAINS (3-high), 36 in., 30 in., 20 in., 18 in., 12 in. and 6 in. SHEARS for Blooms, Billets, Plates, Sheets, Old Rails and Scrap. CRANES—Vale and Towne Pillar Crane (10-ton).; Jib Cranes, Iron and Wooden. STEAM HAMMERS, various sizes and makes. SQUEEZERS (Rotary). FLY WHEELS and BAND WHEELS, various sizes. Punches, Straighteners, Roll Lathe, Riveter, Machine Shop Tools, etc., etc. LOCOMOTIVES, various gauges, sizes and styles.

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BOILERS, ENGINES

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COTTON MILL MACHINERY.

Easy Terms of Payment.

Write for particulars to

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YOU CAN SAVE MONEY

by buying your Dynamos, Lamps, Generators, Motors, etc., from us.

We carry a stock of Second hand Electrical Machinery, repaired and in first-class order. All apparatus guaranteed to be in excellent operative condition.

Central stations and isolated plants can turn scrap dynamos, wire and incandescent lamps into cash by writing to us.

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Second-Hand Tools.

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12"x5' Reed & Prentice.
13"x6' Ames Mfg. Co.
14"x6' Lodge-Davis, compound rest.
16"x6' Fitchburg, taper attached.
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18"x8' Flather, compound rest.
20"x10' Putnam, compound rest.
21"x9' Lodge-Davis, taper attachment.
22"x10' Pond, compound rest
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32"x18' Fay & Scott, compound rest.
40"x20' Pond, extra heavy.
90"x20' Triple geared, extra heavy.

PLANERS.

22"x5' Putnam. 24" x6' Lodge, Davis.
25"x6' Pond Machine Tool Co.
30"x8' Gray Co., latest pattern.
36"x8' Bement. 38"x8' New Haven.
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13" stroke crank, Gould & Eberhardt.
15" stroke friction, Prentice.
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Sensitive Drills, various kinds.
20" swing Barnes, hand feed.
21" swing Prentice, back geared.
22" swing Barnes, back geared, automatic feed.
26" swing Lodge-Davis, complete.
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RADIAL DRILLS.

72" swing, complete tapping attachment.
120" swing Bement, Semi-Universal.
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MILLING MACHINES.

Universal, Kempsmith, "tool size."
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1 5-16 Wire Feed, Jones & Lamson, latest.
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MISCELLANEOUS.

Automatic Gear Cutter, 36", Gould & Eberhardt.
Cutting-Off Machines, 2 and 3 in.
Bliss Press No. 19. Stiles Presses Nos. 2, 3 and 4.
Seller's Horizontal Boring and Drilling Machine.
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Bending Rolls, 6, 8 and 14 ft.

J. J. McCABE, 14 Dey Street, NEW YORK.
Philadelphia Branch, "The Bourse."

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Second-hand. Good Condition.

1 "Deane" Duplex Steam Pump, 7½ x 4½ x 10 No. 18994.
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1 2000 H. P. Berryman Feed Water Heater.
Large assortment of Chapman and Ludlow Valves.

FRANK SAMUEL,
Harrison Building, Philadelphia.

FOR SALE.

1 Harris Corliss Engine, 12x30; fly wheel 10 ft. diameter, 18 in. face.
1 80 H.P. Boiler, 16 ft. long, 60 in. diameter; 46 flues, 2 safety valves.
3 small Knowles Pumps.
1 Submerged Ammonia Condenser (for 15-ton ice plant), with iron tank.
2 Ammonia Compressors, 10x10, belt driven.
Also, lot of Old Plates, Pipe Valves, Pulleys, &c., and Old Iron.

Situated at Raleigh, N. C.

For particulars apply to

HENRY BAYER & SON,
CHARLESTON, S. C.

BARGAINS In New and Second-Hand MACHINERY.

Lathes from 12" to 48", Planers from 20" up to 60", 48", 54" and 60" Radial Drills, No. 2 Newton Milling Machine, No 2 Screw Machine, Shapers from 6" to 30", Boilermakers' Punches, Shears, Edge Planers, Rolls, Drills, Engines, Boilers, Pumps and Dynamos.

FRANK TOOMEY, 131 N. THIRD ST., PHILA.

FOR SALE—CHEAP.

One (1) 24" Horizontal McCormick Turbine Wheel, wheel case large enough for a pair of wheels, all mounted on heavy steel "I" beams, long draft tube to conduct water from wheel. Outfit built to work under 40 ft. head, but can be used under lower heads; 84"x18" Fly Wheel, weighing 5000 lbs.; also 1 Governor. For prices and drawings apply to **THE ANDERSON WATER LIGHT & POWER CO., Anderson, S. C.**

FOR SALE.

One Morgan Traveling Crane,

Ten tons capacity, span 45 feet 6 inches. In first-class condition.

THE WESTINGHOUSE MACHINE CO
PITTSBURGH, PA.

FOR SALE.

A number of Second-hand

SPLIT SWITCHES

for 30 lb. rail, (3 ft. gauge of track), including 4 ft. or 6 ft. Frog, Ground Lever, Switch Points and Connecting Rods.

New and Relaying Steel Rails Bought and Sold.

ROBINSON & ORR,
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FOR SALE.

RAILS and ROLLING STOCK

1500 tons 60 lb. Relaying Rails with Splices.
500 tons 56 lb. Relaying Rails with Splices.
1000 tons new Steel Rails, 48 lbs., with Splices and Spikes.
1000 tons new Steel Rails, 45 lbs., with Splices and Spikes.
Lot of narrow gauge engines, flat and box cars, at Galveston, Texas. Call or write.

BLOCK-POLLAK IRON CO.
CINCINNATI, OHIO, or CHICAGO, ILL.
We are always in the market to buy relaying rails and scrap iron of all kinds for cash.

FOR SALE.

One Standard guage 22-ton Porter, saddle tank, switching locomotive, cylinders 12x18; 1 standard guage 15-ton Baldwin-Forney type, 10x14; 1 3-ft. guage, 12-ton Shay geared locomotive; 1 3-ft. guage, saddle tank, 9-ton Porter, cylinders 8x12; 1 3-ft. guage, 13-ton saddle tank Porter, cylinders 10x14; 1 3 ft. Baldwin Mogul, 18-ton, cylinders 12x18; 100 tons 30-lb. iron rails in Tennessee; 250 tons 25 and 30-lb. rails in Louisiana; 20 second-hand logging cars, 3-ft. guage. Write for prices.

HASKINS WILLIAMS & CO.
1916 Morris Ave., BIRMINGHAM, ALA.
Wanted—Relay Rails and Scrap Iron for Cash.

FOR SALE.

Several Shay Patent

Logging Locomotives.

Also other logging locomotives and cars.

M. MITSHKUN & CO.
Wight St. near Meldrum Ave., Detroit, Mich.

Relaying Rails

50, 56, 58, 60, 67 and 70 pounds to yard
FOR SALE.

DALLETT & CO.
201 Walnut Place, PHILADELPHIA, PA.

RAILROAD EQUIPMENT for Sale

Relaying Rail and Splices,
Locomotives, Coaches and Freight Cars.

HICKMAN, WILLIAMS & CO.
LOUISVILLE, KY.

RAILS and LOCOMOTIVES

We have a lot of RELAYING RAILS with fastenings, 16 pounds to 56 pounds with fastenings. Also 12-ton, 15-ton, 25-ton and 30-ton LOCOMOTIVES. If in the market for RAILWAY EQUIPMENT write us for prices and specifications.

SOUTHERN IRON & EQUIPMENT CO., Atlanta, Ga.

LOCOMOTIVES

ADAPTED TO A VARIETY OF USES.

All of the Lake Street Elevated R. R. Engines

have had less than three and some of them less than one year's wear.

Weight, 28 to 30 tons. Twenty tons on Drivers.
Diameter of Drivers 44 inches.
Four-Wheel Steel Tired Truck under tank. Two-Wheel Pony Front Truck added, if desired.

Tank Capacity, 750 Gallons. May be Increased to 1000 or 1750 Gallons. Vacuum Brakes.

A large line of 8 and 10-wheel road engines; also 4 and 6-wheel connected switchers; also narrow gauge equipment.

For prices and full description write

FITZ-HUGH & COMPANY,
Dealers in Relaying Rail, Locomotives, etc.,
MONADNOCK BLOCK, CHICAGO.
Mention this paper.

Relaying Rails.

Second-hand equipment and light new Steel Rails.
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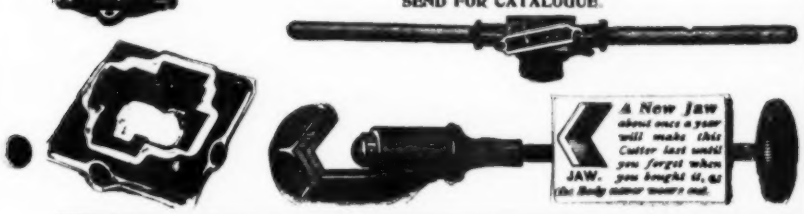

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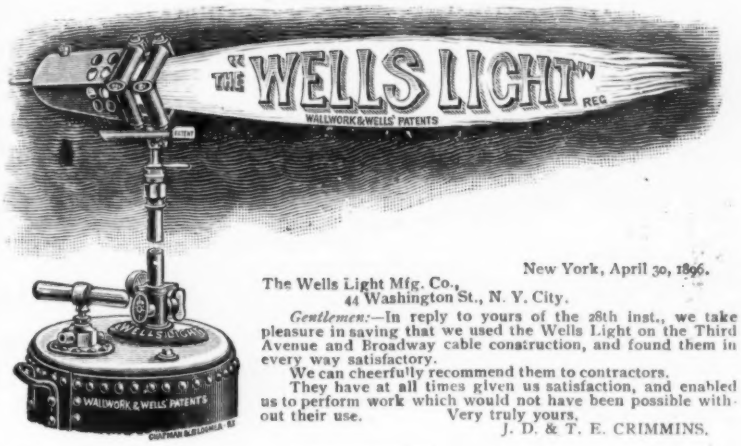

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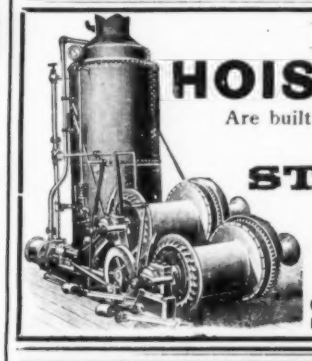

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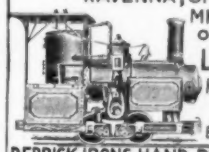

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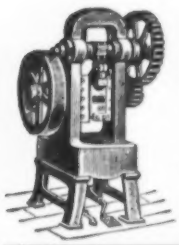

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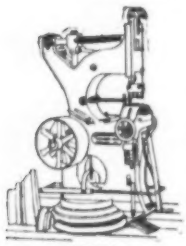

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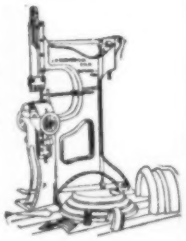

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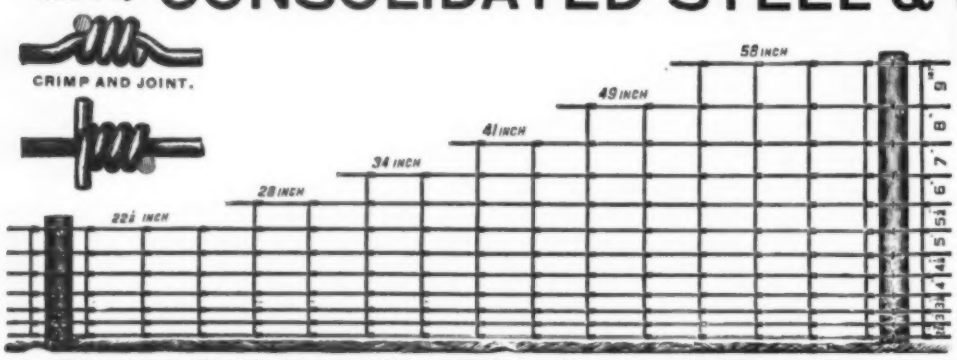

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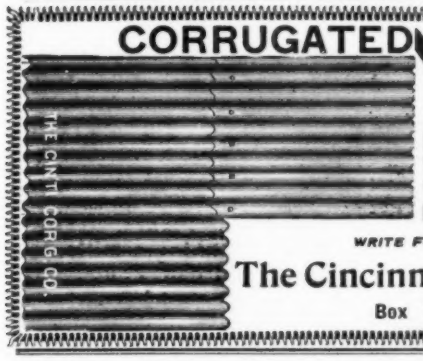

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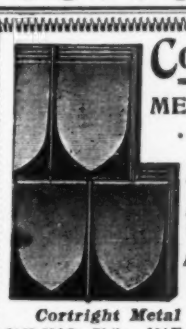

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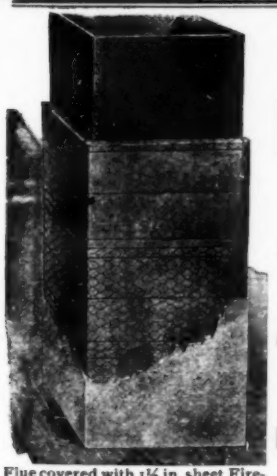

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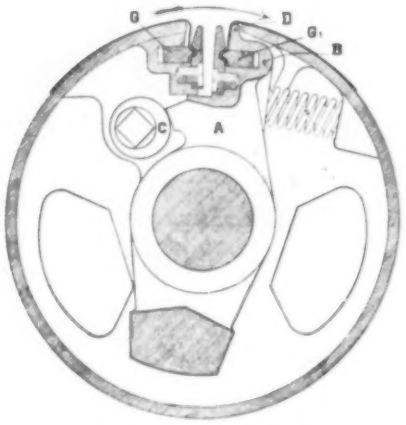

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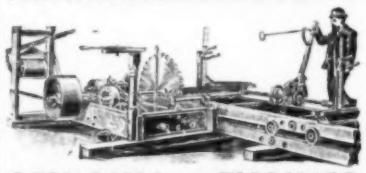

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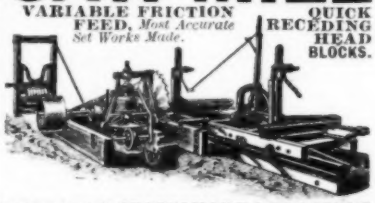

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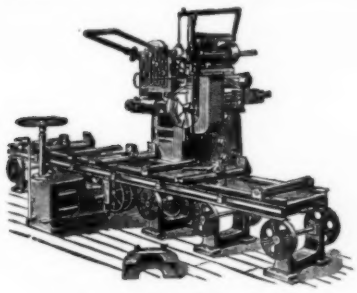

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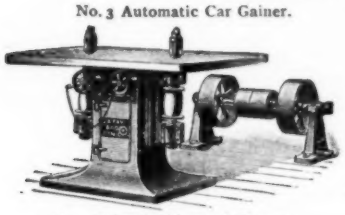

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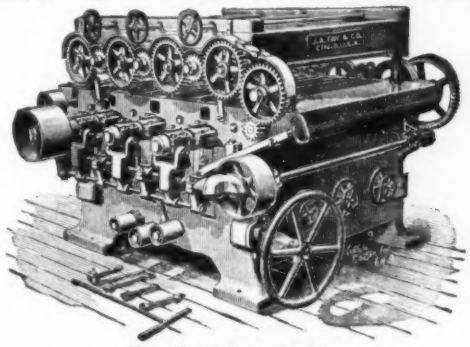

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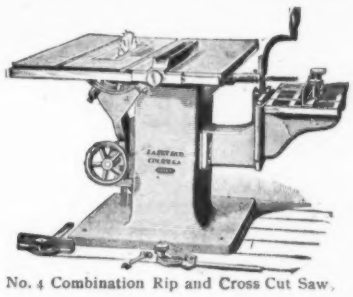

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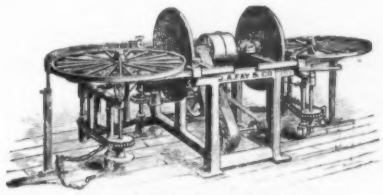

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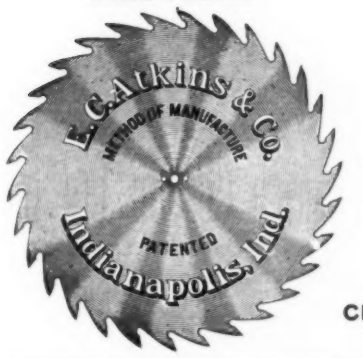

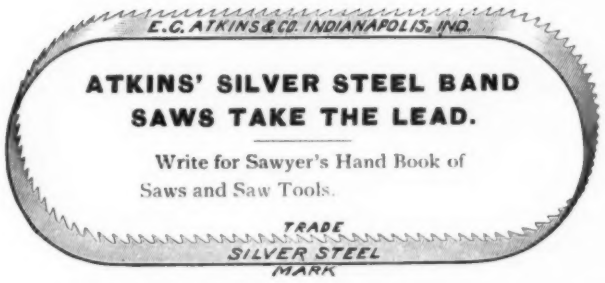

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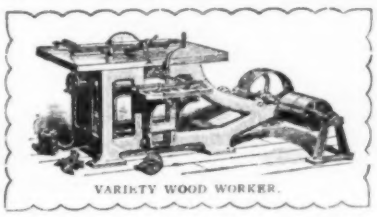

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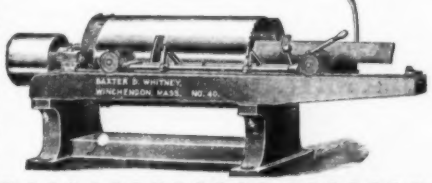

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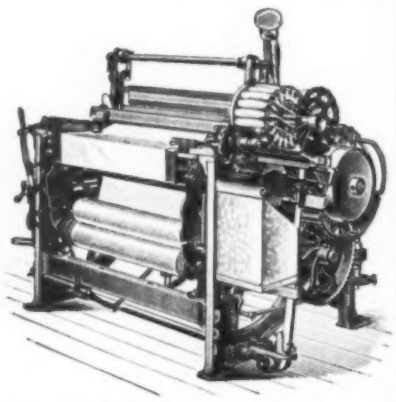

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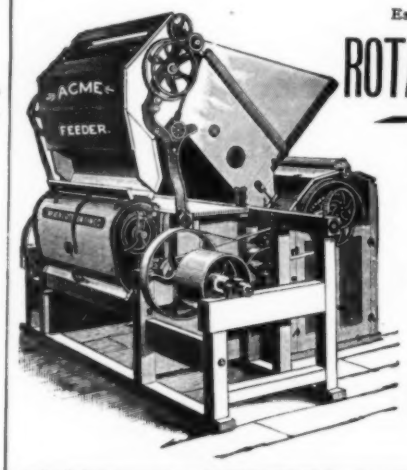

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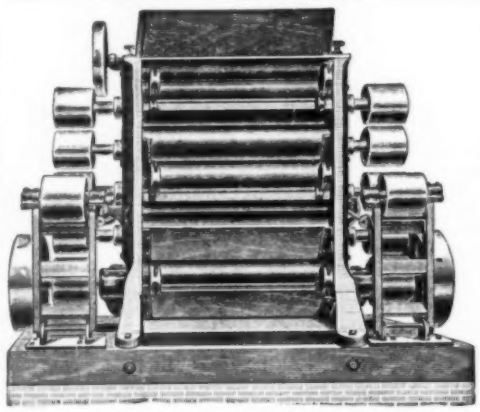

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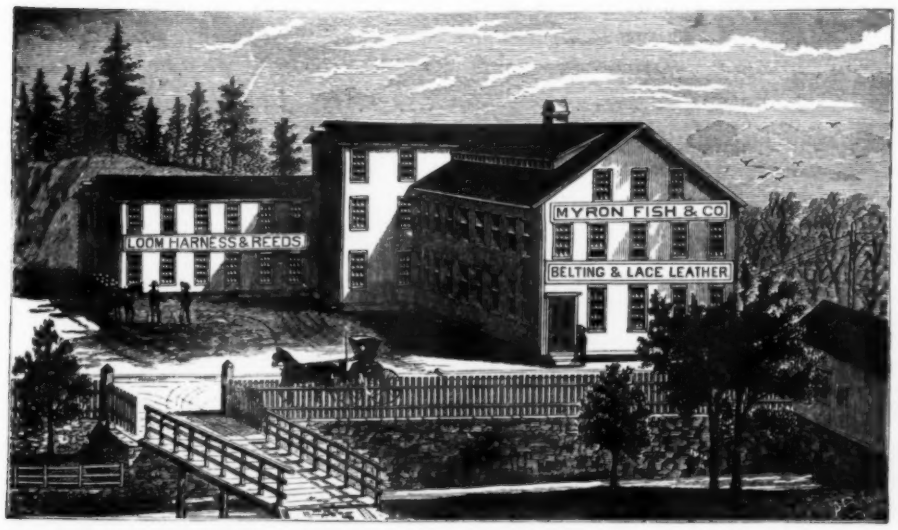

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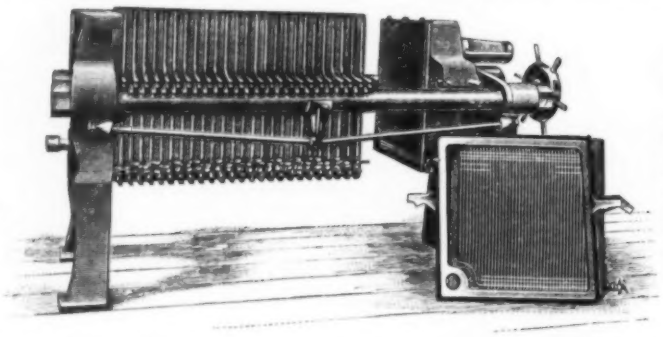

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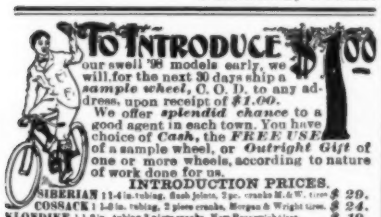

TO INTRODUCE our swell '98 models early, we will, for the next 30 days ship a *sample wheel*, C. O. D. to any address, upon receipt of *$1.00*. We offer *splendid chance* to a good agent in each town. You have choice of *Cash*, the *FREE USE* of a sample wheel, or *Outright Gift* of one or more wheels, according to nature of work done for us. $1.00

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SIBERIAN 1 1-4 in. tubing, flush joints, 2 pc. cranks M. & W. tires $ 29.
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FINE MACHINE ENGRAVING A SPECIALTY.

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NEW YORK, PHILADELPHIA and BALTIMORE to LONDON direct.

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$2.50 BUFFALO TO CLEVELAND.

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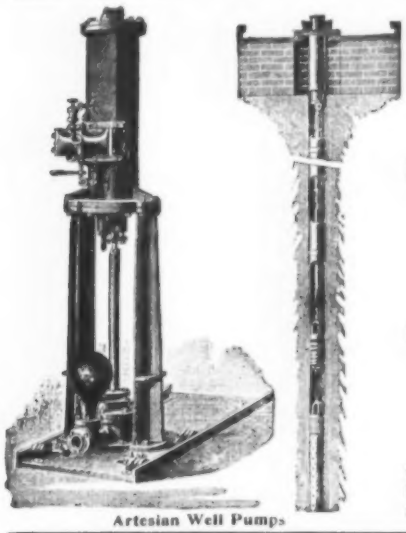

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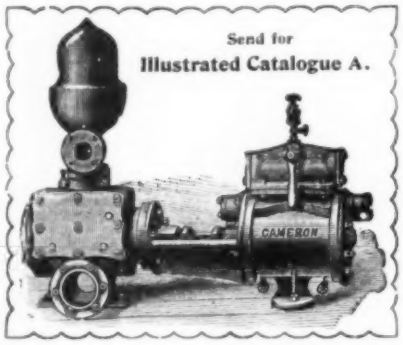
Pumps for Boiler-Feeding, Mines, Refineries, Breweries, Tanneries, Irrigating, Fire Purposes Railroads and Filling Tanks.



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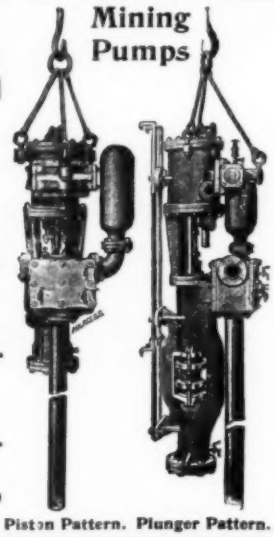

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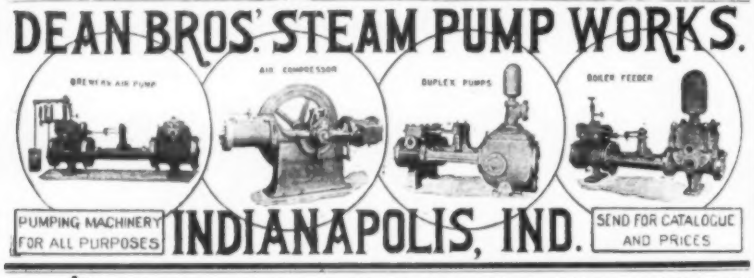

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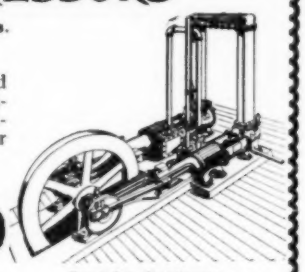

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The Handiest, Simplest, and Most Efficient Steam Pump for General Mining, Quarrying, Railroad, Irrigating, Drainage, Coal-washing, Tank-filling, Paper Mill, Sewer and Bridge Contractors' Purposes, etc., etc. Muddy or gritty liquids handled without injury to the Pump.

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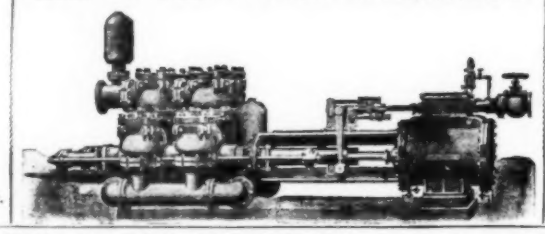

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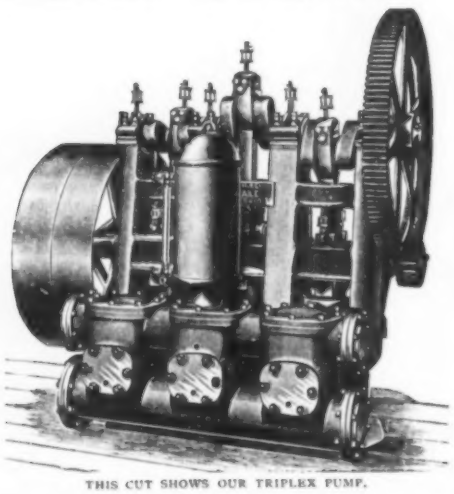

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Triplex Pumps, LATEST AND MOST APPROVED DESIGNS. SINGLE and DOUBLE ACTING.

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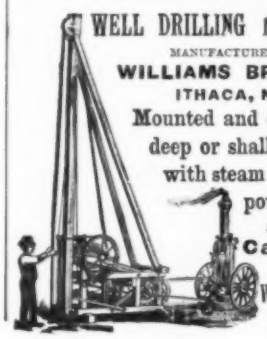

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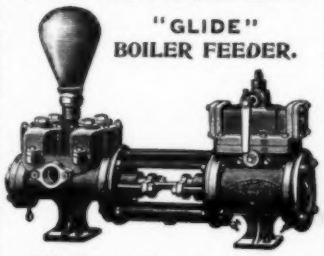

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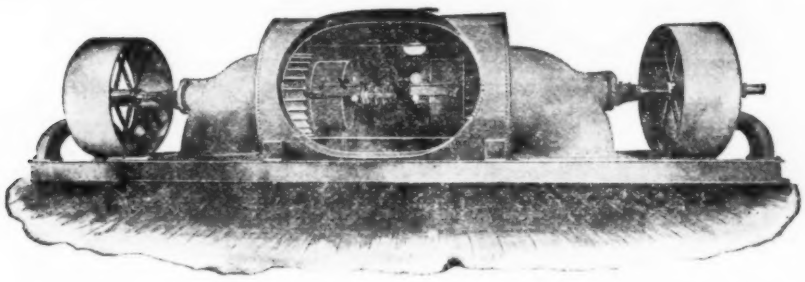

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Of Every Description.

We would be glad to make estimates and quote prices, and believe that we can make it manifestly to your advantage to trade with us. LET US KNOW YOUR WANTS.

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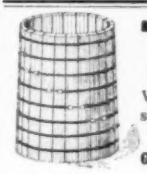

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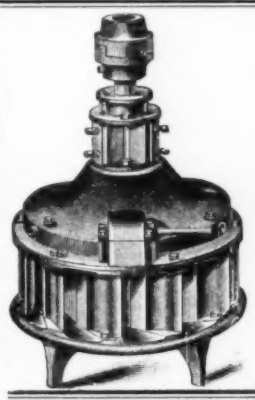

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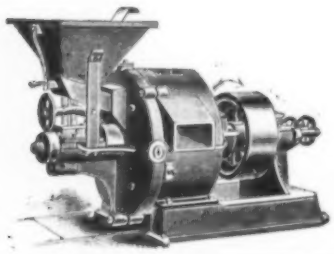

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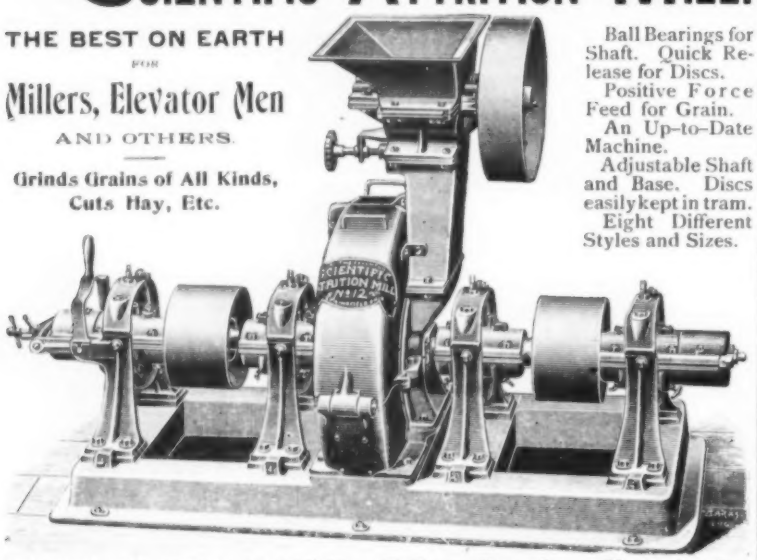

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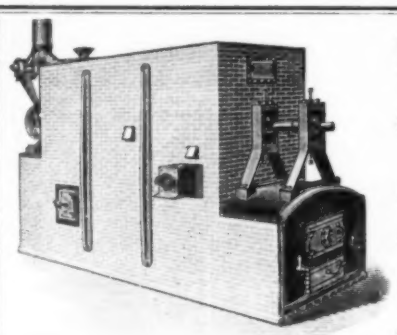

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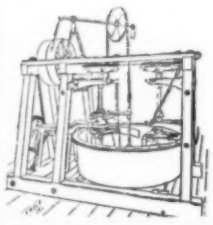

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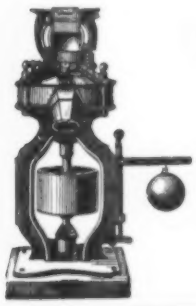

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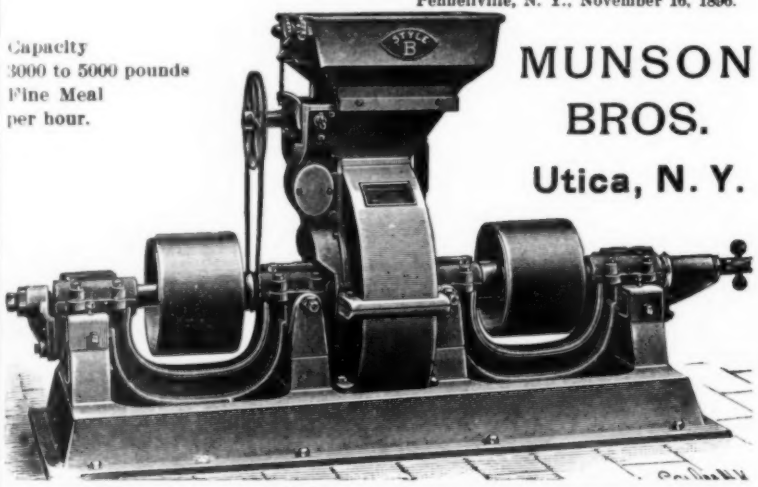

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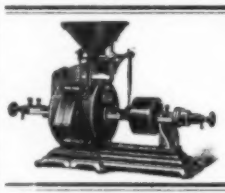

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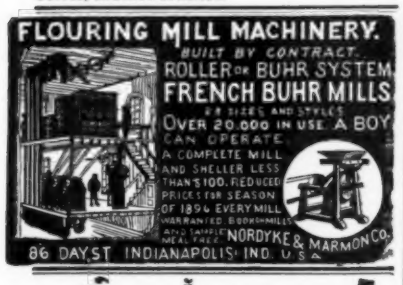

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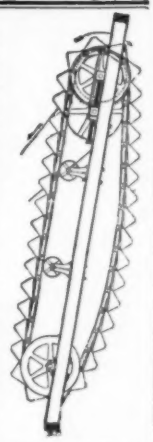

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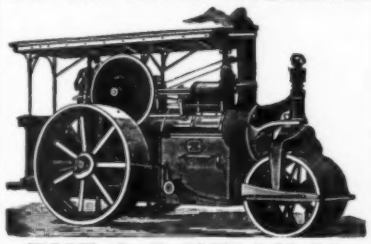

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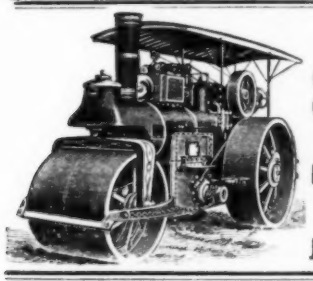

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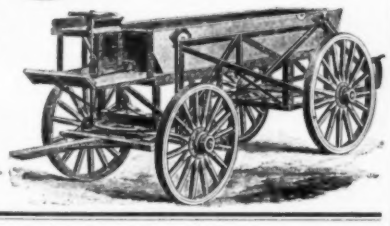

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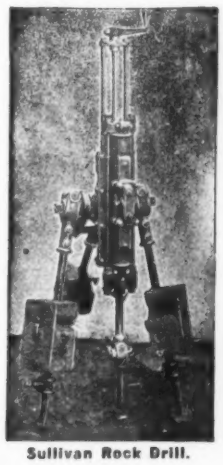

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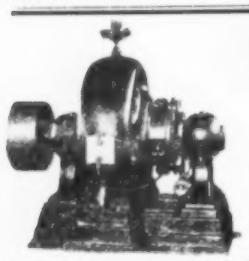

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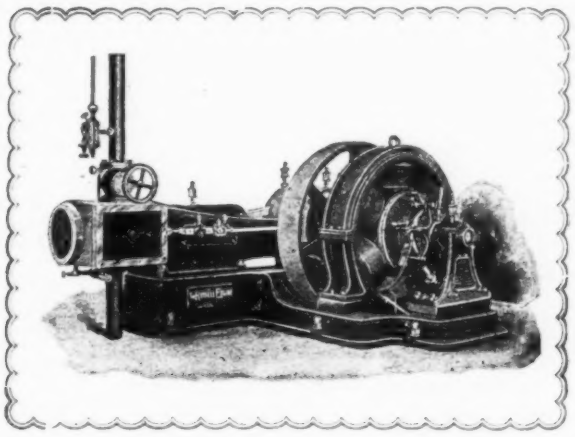

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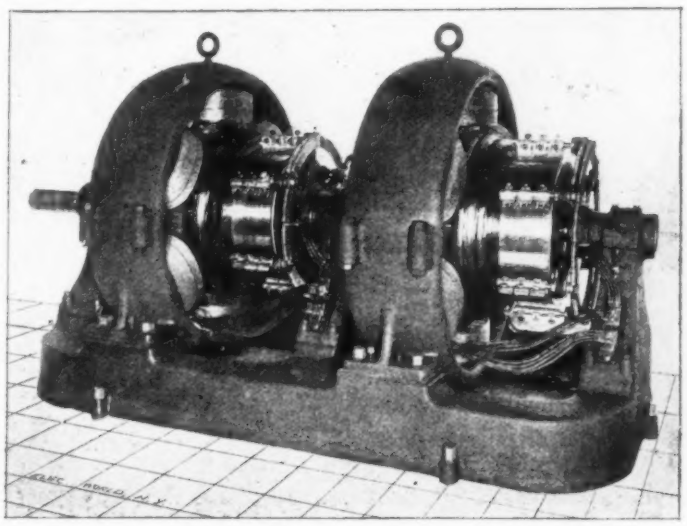

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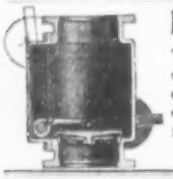

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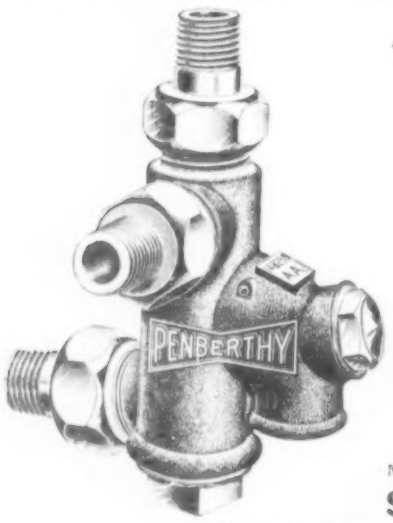

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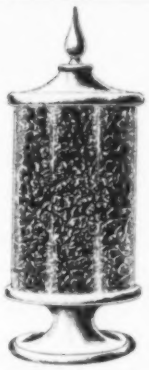

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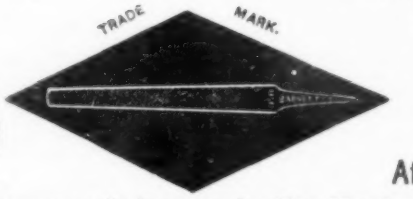

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